T
Un27L
1907

UNIVERSITY
OF CALIFORNIA
LOS ANGELES

SCHOOL OF LAW
LIBRARY

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/listofadjudicate00undeiala

PUBLICATIONS
OF
JOHN BYRNE & CO.

UNITED STATES SUPREME COURT PRACTICE AND PROCEDURE

With the Rules and Forms

BY HEBER J. MAY

8 vo. 1000pp. $6.50 Express Paid

AN INDEX DIGEST TO THE DECISIONS OF THE UNITED STATES SUPREME COURT

In Patent Causes From 1800 to 1877

BY WOODBURY LOWERY

8 vo. $5.00 Express Paid

FOREIGN PATENT AND TRADE-MARK LAWS

A Comparative Study

WITH

Tabular Statements of Essential Features of Such Laws

BY ARTHUR P. GREELEY

8 vo. $5.00 Express Paid

CARD DIGEST OF PATENT CASES

A Digest Issued Every 3 Months in Card Form

It Is Not a Set of Seperate Digests

A Single Digest Always Up-to-Date

A LIST

OF

ADJUDICATED PATENTS

ARRANGED

BY NUMBER AND BY SUBJECT-MATTER

OR TITLE OF INVENTION

BY

LINEAS D. UNDERWOOD

ASSISTED BY

CARL A. RICHMOND

AND

RICHARD G. POVEY

WASHINGTON, D. C.

JOHN BYRNE & CO.

1907

COPYRIGHT, 1907
BY LINEAS D. UNDERWOOD

ALL RIGHTS RESERVED

T
Un 27L
1907

THE J. W. STOWELL PRINTING CO.
FEDERALSBURG, MARYLAND.

ESTE 9 Mr. 53

PREFACE

This compilation was begun after conversations with a number of prominent patent lawyers to whom the question whether a given patent or given subject matter had ever been adjudicated had become very difficult if not impossible of determination with any degree of certainty. No list of adjudicated patents arranged according to subject-matter or title of invention has been published for about twenty years, as a result of which no list of the *unexpired* patents arranged according to subject matter is now available. Several numerical lists have been published but they are now out of date. It is the purpose of this volume to bring this work down to date and to provide, in a single volume, a ready reference to all the patents which have been litigated in the courts of this country from the beginning to date.

The citations in the various reports have not been accepted without careful verification by reference to a printed copy of the patent itself; the number, date, title of invention, etc., of every patent has been compared and wherever an incorrect number has been given the correct number has been substituted; furthermore reliance has not been placed on printed lists which purport to include all patents referred to in a given report, but the decision itself, the statement of the case, and the syllabi, were all examined. Many references have been included in the subject-matter list which have no corresponding reference in the numerical list as the numbers of the patents could not be determined. I have also been able to include by the courtesy of the patent attorneys throughout the country, a large number of patents passed upon by the courts in opinions which have not been reported.. In these several ways I have made available hundreds of patents which cannot be found in any of the previous lists of this character.

760820

This volume extends to and includes all cases reported in Vol. 146 Federal Reporter, Vol. 202 U. S. Reports, Vol. 40 Court of Claims Reports and Vol. 27 of the Reports of the Court of Appeals of the District of Columbia.

I desire to acknowledge my obligations to Mr. Carl A. Richmond and Mr. Richard G. Povey, who have assisted me in planning and preparing the work, and any credit which may attach to the publication is due to them as much as to me.

I am also indebted to Mr. Paul Synnestvedt, of the Pittsburg bar, who has aided me much, not only by suggestions, but by furnishing me with valuable data which he has collected for private use.

LINEAS D. UNDERWOOD.

WASHINGTON, D. C.
March 1, 1907

Contents

	PAGES
Abbreviations	viii
Numerical List of Mechanical Patents, Table I	1–177
Numerical List of Reissued Mechanical Patents Table II	179–212
Numerical List of Design Patents, Table III	213–216
Subject-Matter List of Design Patents, Table IV	217–219
Subject-Matter List of Mechanical Patents, Table V	220–326

Scope of Publication

The following law reports, in addition to a number of minor reports, have been drawn upon in the preparation of this volume:

U. S. Reports, Vols. 1 to 202.
Federal Reporter, Vols. 1 to 146
Federal Cases (entire series).
Court of Claims Reports, Vols. 1 to 40.
Appeal Cases, D. C., Vols. 1 to 27.

Abbreviations

App. D. C.—Court of Appeals Cases, District of Columbia.
Ban. and Ard.—Banning and Arden's Patent Cases.
C. C. A. 5th Cir.—Circuit Court of Appeals for the Fifth Circuit. (Similarly for other Circuits).
C. C., W. D. Pa.—Circuit Court for the Western District of Pennsylvania. (Similarly for other Districts).
C. D.—Decisions of the Commissioner of Patents.
Ct. of Cls.—Court of Claims Reports.
F.—Federal Peporter.
F. Cas.—Federal Cases.
Fish.—Fisher's Patent Cases
How.—Howard's Supreme Court Reports
MacA. Pat. Cas.—MacArthur's Patent Cases.
MacA. & MacK.—MacArthur and MacKey's Reports of the Supreme Court of the District of Columbia.
MacKey—MacKey's Reports of the Supreme Court of the District of Columbia.
O. G.—Official Gazette of the Patent Office.
U. S.—United States Supreme Court Reports.
Wall.—Wallace's Supreme Court Reports.

TABLE I.

Chronological List of Adjudicated Patents.

[This list includes all adjudicated original patents covered by the terms "art," "machine," "manufacture," and "composition of matter." For Reissues see Table II; for Designs, see Table III].

NOTE:—More complete data are given in connection with all unexpired patents.

Nov. 17, 1776. Forging bolts and round iron, C. Reutgen, F. Cas. 11710.
June 5, 1779. Machine for making cotton and wool cards, A. Whittemore, F. Cas. 17600; F. Cas. 17601.
Dec. 18, 1790. Hopper-boy, O. Evans, F. Cas. 4555; F. Cas. 4559; F. Cas. 4560; F. Cas. 4562; F. Cas. 4564; F. Cas. 4565; F. Cas. 4571; F. Cas. 4572; 9 Cranch 199; 3 Wheat. 455; 7 Wheat. 356; 7 Wheat. 453.
Feb. 22, 1798. Cutting and pointing comb teeth, I. Tryon, F. Cas. 14208
Feb. 14, 1799. Cutting and heading nails, J. Perkins, F. Cas. 5718; F. Cas. 5719.
Feb. 20, 1800. Grist-mill, B. Tyler, 6 Cranch 324.
July 16, 1806. Making boots and shoes, J. Bedford, F. Cas. 1217.
Nov. 6, 1806. Suspenders, J. Dawson, F. Cas. 3670.
Feb. 22, 1807. Cutting and heading nails, J. Reed, F. Cas. 10430; F. Cas. 10432.
Dec. 19, 1808. Fire engine alarm bell, J. P. Parke, F. Cas. 10715.
Feb. 11, 1809. Steamboat, R. Fulton, F. Cas. 3520.
May 8, 1809. Splitting leather, J. Woodcock, F. Cas. 17971.
June 27, 1809. Reel for dyeing all kinds of silk goods, W. Barrett, F. Cas. 13337.
Feb. 8, 1811. Cutting nails or brads, Sawin & Skinner, F. Cas. 12391.
May 14, 1812. Mold for casting metal buttons, G. W. Robinson, F. Cas. 5576.
May 23, 1813. Pump, J. Perkins, F. Cas. 8568.
Feb. 12, 1814. Auger for boring guns, D. Pettibone, F. Cas. 11043.
Apr. 28, 1815. Printing on bank notes, etc., J. Kneass, F. Cas. 7875.
Dec. 4, 1816. Steam tow-boat, J. L. Sullivan, F. Cas. 13597.
1818. Plow, Ogle, F. Cas. 10462.

JULY 6, 1818—MAY 1, 1829

July 6, 1818. Leather tubes or hose, Pennock & Sellers, F. Cas 10941. 2 Pet., 1.

Sept. 9, 1818. Dyeing and finishing silk woven goods, Stearns & Barrett. F. Cas. 1047.

Sept. 6, 1819. Turning irregular forms, T. Blanchard, F. Cas 1506 F. Cas. 1510; F. Cas. 1517; F. Cas. 1518; F. Cas. 1519 F. Cas 1520; F. Cas. 1521.

Apr. 3, 1819 Double speeder for cotton, P. Moody, F. Cas. 1681; F Cas. 9745.

July 16, 1819. Saddles without saddle-trees, P Dixon, F. Cas. 3931.

Jan. 20, 1820. Turning irregular forms, T. Blanchard, F. Cas. 1506; F. Cas. 1510; F. Cas. 1512; F. Cas. 1515; F. Cas. 1516 F. Cas. 1517; F. Cas. 1518; F. Cas. 1520; F. Cas. 1521.

Nov. 17, 1819. Inclined circular plane, M. Isaac, F. Cas. 7096.

Jan. 10, 1820. Bread finisher, E. Treadwell, F. Cas. 17277.

March 16, 1820. Circular saw, Eastman & Jaquith, F. Cas. 4255.

May 4, 1820. Watch chain machine, S. Keplinger, 10 Wheat. 358.

Nov. 9, 1820. Plow, Wood & Brundage, 9 Wheat. 603.

June 20, 1821. Preparing and packing thread, R. Langdon, F. Cas. 8059.

Aug 11, 1821. Hat bodies, J. Grant, 6 Pet. 218.

May 15, 1822. Stop-cock, J. Morris, F. Cas. 9831.

June 19, 1822 See Reissue May 7, 1829.

Aug. 3, 1822. Securing ships from decay, W. Mellus, F. Cas. 9404.

Dec. 28, 1822. Shingle machine, W. Earle, F. Cas. 4247.

July 14, 1824 Bedstead, O. R. Herbert, F. Cas, 6394.

Oct. 1, 1825. Plows, G. Davis, F. Cas. 3645.

May 18, 1826. Biscuit and sugar bread manufacture, E. Treadwell, F. Cas. 14154.

Nov. 4, 1826. Making glass door knobs, Whitney & Robinson, F. Cas. 17585.

Nov. 6, 1826. Bilge lever for ships, J Thomas, F. Cas. 13914.

Dec. 7, 1826. Silver spoon manufacture, Wm. Gale, Gilpin's opinion 3 Op., 595.

Dec. 15, 1826. Wool manufacture, J. Goulding, F. Cas. 7523. See Reissue July 29, 1836.

Dec. 27, 1828. Planing mill, W. Woodworth, F. Cas. 1944; F. Cas. 1953; F Cas. 5390; F. Cas. 5402; F. Cas. 9884; F. Cas. 10480; F. Cas. 11191; F. Cas. 16851; F. Cas. 17214; F. Cas. 17787; F. Cas. 18016; 4 How. 646; 4 How. 712; 15 How. 214; see Reissue 71.

March 18, 1829. Ice-cutting apparatus, N. J. Wyeth, F. Cas. 18107.

March 18, 1829. Railroad car, I. Knight, see Reissues July 10, 1834, and Apr. 28, 1836.

Apr. 30, 1829. Loom, A. Stone, F. Cas, 13487.

May 1, 1829. Mode of cutting veneer by machinery, C. P Burnap, F. Cas. 2191.

July 15, 1829. Loom, J. Arnold, F. Cas. 14368.
Oct. 19, 1829. Water wheel, Z. & A. Parker, F. Cas. 2288; F. Cas. 2494; F. Cas. 9437; F. Cas. 10725, F. Cas. 10726; F. Cas. 10727; F. Cas. 10731; F. Cas. 10733; F. Cas. 10736; F. Cas. 10737; F. Cas. 10738: F. Cas. 10740; F. Cas. 10748; F. Cas. 10749; F. Cas. 11075; F. Cas. 11099; F. Cas. 17896.
Jan. 29, 1830. Grinding mill-stones, J. C. Smith, see 397 which is the same patent.
May 24, 1830. Saw set, H. Aiken. F. Cas. 109
Nov. 12, 1830. Iron chest or safe, J. Scott, F. Cas 3753.
Aug. 5, 1831. Pump, J. Reed, F. Cas. 11645.
July 20, 1831. Axle tree for carriages, railway cars, R Winans, F. Cas. 17858.
Aug. 23, 1831. Rails for railroad carriages, J. Stimpson, 4 How. 380; 10 How. 344; 1 Wall. Jr. 162.
Oct. 25, 1832. Railway carriages, I. Cooper, F. Cas. 3200.
Dec. 17, 1832. Stove, H. Stanley, see Reissue Nov. 28, 1836.
Mar. 3, 1833. Preparing palm leaf, J. C. Smith, see Reissue 31.
Nov. 19, 1833. Pump, J. & J. Reed, F. Cas. 11645.
March 8, 1834. Steam engine, J. B. Emerson, F. Cas 4440; 6 How. 437; 11 How. 587.
June 21, 1834. Harvester, C. H. McCormick, F. Cas. 8724.
Oct. 1, 1834. Eight wheeled cars, R. Winans, F. Cas. 17861; F. Cas. 17863; F. Cas. 17864; F. Cas. 17865; 17 How. 30; 21 How. 88.
Oct. 10, 1834. Cooking stove, C. Wilson, F. Cas. 17811.
Dec. 2, 1834. Hook or brad-headed spikes, H. Burden, F. Cas. 14195.
March 3, 1835. Casting chilled rollers, J Harley, 1 How., 202.
March 27, 1835. Saw-mill, N. & P. Crosby, F. Cas. 3424.
Apr. 3, 1835. Preparing palm leaf, J. C. Smith, see under date Mar. 3, 1833.
Sept. 26, 1835. Curves for railways, J. Stimpson, 1 Wall., Jr., 164; 14 Pet., 448.
Jan. 20, 1836. Air-tight stove, J. Orr, see Reissue 48.
Feb. 25, 1836. Revolving fire arms, S Colt, see Reissue 124.
March 2, 1836. Machine for rolling dough and cutting crackers, Wm. R. Nevins, F. Cas. 10136.
March 4, 1836. Plow, Prouty & Mears, F. Cas. 11446; 16 Pet. 336.
July 2, 1836. Compound lever, H. G. Guyon, F. Cas. 5881.

1836

16 India rubber, E. M. Chaffee, F. Cas. 3674; F. Cas 3676; F. Cas. 3683; F. Cas. 3686; F. Cas. 3687; F. Cas. 3691; 19 How. 211; 20 How. 216.

68 Friction matches, A. D. Phillips, F. Cas. 1948; F. Cas. 2262; F. Cas. 2263; F. Cas. 2264; F. Cas. 12186.

79—1,839

1836 (Concluded)

79 Screw-cutting machine, H. Crum, F. Cas. 11156.
97 Making brick or tiles, J. Wood, 5 How. 46.

1837

144 Scythe snathes, D. Peirce, F. Cas. 153.
389 Railroad cars and carriages, R. Imlay, F. Cas. 7012.
397 Grinding mill-stones, J. C. Smith (same patent as Jan. 29, 1830), F. Cas. 13089.
441 See Reissue 3.
461 See Reissue 60.
491 Power loom, W. Crompton, F. Cas. 4930. See Reissue 247.
505 Applying heat to cooking stoves, J. G. Hathaway, F. Cas. 6213.
542 Grain thresher and cleaner, H. and J. Pitts, F. Cas. 11193; F. Cas. 11194; F. Cas. 11195; F. Cas. 11196.

1838

640 Cast-iron wheels, Truscott, Wolf & Dougherty, F. Cas. 9055; F. Cas. 9056; F. Cas. 9057.
777 See Reissue 17.
797 Bedstead, J. Lindlay, F. Cas. 1747; F. Cas. 1748.
821 Casters for bedsteads, Blake and Philos, F. Cas. 1503.

1839

1,090 Preparing caoutchouc, N. Haywood, F. Cas. 13654.
1,092 Tailor's shears, R. Heinrish, F. Cas. 6327.
1,157 Cooking stove, D. Buck, F. Cas. 2079; F. Cas. 2080; F. Cas. 2081; F. Cas. 2082.
1,243 Padlock, J. Nock, 2 Ct. of Claims, 451.
1,252 Making axle boxes, J. Babbitt, F. Cas. 11918.
1,336 Paper manufacture, K. & A. Knight, F. Cas. 7884.
1,396 Ore furnace, J. A. Roth, F. Cas. 3017.
1,411 Cutting threads on wood and screws, H. Crum, F. Cas. 11156.

1840

1,503 Palm leaf hat pressing machine, C. Gorham, F. Cas. 5626.
1,517 G. W. Hildreth, F. Cas. 6309.
1,531 Rocking chair, S. Bean, F Cas. 1173.
1,630 Applying waste heat to boilers, M. Bell, F. Cas. 1247; F. Cas. 4581.
1,647 Electric telegraph, S. F. B. Morse, F. Cas. 13043; 15 How. 62. See Reissue 117.
1,658 Reaction water-wheel, Parker & McKelvey, F. Cas. 2494; F. Cas. 11075.
1,714 Bark grinding mill, Montgomery & Harris, F. Cas. 17634.
1,757 Spike making machine, H. Burden, F. Cas. 14195; F. Cas. 14196; F. Cas. 14199; 14 How. 218; 17 How. 72.
1,839 See Reissue 140.

1840 (Concluded) 1,868—3,857

1,868 Locomotive engines, regulating steam for, R. Winans. Winans v. Danforth, M. S., N. Y. 1860.
1,890 Rolling puddle balls, H. Burden, 15 How. 265.

1841

1,980 Fire engines, Ransom & Wenman, F. Cas. 11573.
2,021 See Reissue 82.
2,174 Circular saw-mill, G. Page, F. Cas. 10662; 24 How. 167.
2,197 Knobs for doors, J. E. Hotchkiss, F. Cas. 6718; 11 How. 248.
2,275 S. Slocum, F. Cas. 313.

1842

2,435 Cleaning and polishing cutlery, M. N. Armstrong, F. Cas. 544.
2,488 Harvester, J. Reed, F. Cas. 11610.
2,558 See Reissue 67.
2,631 Lifting valves, etc., F. E. Sickles, F. Cas. 12838; F. Cas 12,-841; 3 Wall., Jr., 196; 19 Wall., 611.
2,636 Cooking stove, E. Foote, F. Cas. 4916; F. Cas. 4917; F. Cas. 4918; F. Cas. 4919; F. Cas. 4920; 14 How. 218; 20 How. 285.
2,708 Water-wheel, R. Rich, F. Cas. 11757.
2,725 See Reissue 409.
2,768 Brick-press, A. Hall, F Cas. 5954.
2,872 Steam-engine, A. Connison, F. Cas. 11259.
2,886 Door-lock, J. P. Sherwood, 1 Wall. 155. See Reissue 401.

1843

2,970 J. J. Howe, F Cas. 313
3,089 Cotton speeder, W. C. Davoll, F. Cas. 3662.
3,106 Method of connecting tillers with rudder heads of vessels, H. Waterman, F. Cas 2929.
3,117 Safe, D. Fitzgerald, F Cas. 53; F. Cas. 11758; F. Cas. 17647; F. Cas. 17648; F. Cas 17649; F. Cas 17650; 10 How. 477; 10 How. 509.
3,120 Picking and cleaning wool and cotton, F. A. Calvert, F. Cas. 10123.
3,292 See Reissue 142.

1844

3,431 Straw cutter, W. Hovey, F. Cas. 6742.
3,461 India rubber shirred goods, C. Goodyear, F. Cas. 3690; F. Cas. 5228; F. Cas 5568; F. Cas. 11932; F. Cas. 17183; 4 Blatch. 278
3,633 Indian rubber, soft rubber, C. Goodyear, 2 Wall., Jr., 356. See Reissue 1085.
3,802 See Reissues 1112 and 1113.
3,824 Lamp black, J. G. Mini, F. Cas. 2673
3,857 Machine for cutting leather in soles, R. Richards, F. Cas. 4978.

3,876—5,876

1845

3,876 Stove, S. Henry, F Cas. 12116; F. Cas. 12117; F. Cas. 12118
3,885 See Reissue 92.
3,889 Railroad rails, W. M. C Cushman, F. Cas. 3514.
3,895 Harvester, C. H. McCormick, F. Cas. 8724; F. Cas. 8726; F Cas. 8727; 19 How. 96; 20 How. 402.
3,987 Power loom, E. B. Bigelow, F. Cas. 8569.
4,023 Wool carding machine, S. R. Parkhurst, F. Cas. 3477; F. Cas. 10757; F. Cas. 10758; F. Cas. 10759; F. Cas. 10760; 18 How. 289. See Reissue 1137.
4,120 See Reissue 1400.
4,199 Steam engine, F. E. Sickles, F. Cas. 12832; F. Cas. 12835. See Reissues 910 and 1113.
4,204 Grinding tools, W. Hovey, F. Cas. 6745. See Reissue 96.
4,213 Removing truck wheels, T. D. Stimpson, F. Cas. 12885.
4,266 See Reissue 303.

1846

4,453 See Reissue 118.
4,459 Cultivator, N Ide, F. Cas. 14127; F. Cas. 14865.
4,472 See Reissues 396, 1086, 1087 and 2942.
4,595 Horse power, D. Carey, F. Cas. 11193.
4,726 Truss bridge. W. Howe, 10 Wall. 367.
4,750 Sewing machine, E. Howe, Jr., F. Cas. 6775; F. Cas. 7500. See Reissue 1154.
4,816 Bell telegraph, Jackson & Judson, F. Cas. 16790.
4,848 Surgical operation (anæsthetic), Jackson and Morton, F. Cas. 9865. Cushing's opinion, 8 Op. 270.
4,860 Harness saddles, J. T. Denniston, F. Cas. 10311.
4,912 See Reissue 484.

1847

5,006 See Reissue 747.
5,112 See Reissue 468.
5,175 Cars for coal. R. Winans, 15 How., 344.
5,227 See Reissues 449 and 742.
5,253 Lead pipe machinery, S. G. Cornell, F. Cas 11002; F. Cas. 13760.
5,254 Safety apparatus for steam boilers, T. Clark, F. Cas 2866.
5,335 Harvester, C. H. McCormick, F. Cas 8726. See Reissue 239.
5,352 Portable steam pumps, Wm. Boardman, Jr., F. Cas 608.

1848

5,476 Saddles, A. H. Gazley. F. Cas. 10311.
5,522 See Reissues 1393, 1394, and 1395.
5,531 Cast-iron car wheels, A Whitney, F. Cas. 17592; F. Cas. 17,593; F. Cas. 17594; 14 Wall. 434; 14 Wall. 620.
5,575 See Reissues 187 and 243.
5,876 Boot tree, J. How, F. Cas. 4239.

1849

5,993 Shower batb, E. Larabee, F. Cas. 8084.
6,025 Knitting needles, J. Hibbert, F. Cas. 110.
6,086 Cooking stove, E. Vance, F. Cas. 16837; 1 Black, 427.
6,099 See Reissue 518
6,106 Wire fence, H. Jenkins, F. Cas. 10218.
6,135 Carding engine, J. Dyson, F. Cas. 4229.
6,148 See Reissues 302 and 1280
6,162 See Reissues 759 and 763.
6,245 See Reissue 331.
6,328 Electric telegraph, A. Bain, F. Cas. 754.
6,420 S F. B. Morse, F. Cas. 754; F. Cas. 9861; 15 How 62.
6,439 See Reissue 2125,
6,545 See Reissue 306.
6,757 Metallic packing for steam-engines, G. S. Cox, F. Cas 9291.
6,762 See Reissue 231.
6,806 Jacquard loom, E B. Bigelow, F. Cas. 8569.
6,835 Wash board, O. Rice, F. Cas. 17303; F. Cas. 17304.
6,939 See Reissue 947.
6,951 See Reissue 853.

1850

7,027 Circular saw-mill, N. G. Norcross, F. Cas. 8182.
7,263 Fluid level, W. G. Ladd, Jr., F. Cas. 2593.
7,446 See Reissue 217.
7,531 Churn, J. O'Neil, F. Cas. 2167.
7,686 Printer's ink, M. M. Matthews, F. Cas. 9292; 1 MacA. Pat. Cases, 145.
7,676 Wrought-iron car wheels, H. Aiken, F. Cas. 108.
7,755 Valves for governors, J & A Judson, F. Cas. 7565; F. Cas. 7569.
7,776 Sewing machine, A. B. Wilson, F. Cas. 11341. See Reissues 316 and 414.
7,813 See Reissues 1914 and 1915.
7,854 Vats for tanning hides, L. C. England. F. Cas. 4487.

1851

7,931 See Reissue 568.
8,047 Cooking stove, D G. Littlefield, F. Cas. 11004; F. Cas. 11008; 21 Wall. 205.
8,075 See Reissues 556 and 557
8,119 Omnibus steps, Wm. H. Hoyt, F. Cas. 13373.
8,154 See Reissue 325.
8,192 See Reissues 305, 1110, and 1682.
8,212 See Reissues 1003, 1177, and 1683.
8,253 See Reissue 780.
8,282 See Reissue 1388.
8,294 See Reissue 278.

1851 (Concluded)

8,322 See Reissue 313.
8,368 Weaver's temples, A. Jillson, F. Cas. 7321.
8,427 See Reissue 666.
8,552 Car-brake, F. A. Stevans, F. Cas. 4447; F. Cas. 4448; 6 F. 283.
8,589 Machine for making brass kettles, H. W. Hayden, F. Cas. 17,-256. See Reissues 3995 and 3996.
8,621 Setting mineral teeth, J. Allen, F. Cas. 225.

1852

8,641 Gold pen, A. W. Rapp, F. Cas. 11577.
8,720 See Reissue 1262.
8,724 See Reissues 4672 and 4673.
8,756 Zinc white manufacture, S. F. Jones, F. Cas. 7487.
8,861 See Reissue 3794.
8,876 Sewing machine, I. M. Singer, F. Cas. 12900.
9,005 Harvester, G. H. Rugg, F. Cas 12114.
9,109 Car brake, Thompson & Bachelder, F. Cas. 9893; F. Cas. 12,-414; F. Cas. 12415; F. Cas. 12417; F. Cas. 12423; F. Cas. 12424; 9 F. 512; 97 U. S. 554; 98 U. S. 546; 105 U. S. 189.
9,432 See Reissue 540.
9,435 Rotary knitting machine, D. Tainter, F. Cas. 14088.
9,484 Hat body manufacture, E. L. Hopkins, F. Cas. 2190.

1853

9,653 See Reissues 2843, 2844, and 3014.
9,688 Screw machine, T. J. Sloan, F. Cas. 10158.
9,700 Hat body machine, J. S. Taylor, F. Cas. 6250; 16 Wall. 544.
9,703 Rails for railroads, P. O'Reilly, F. Cas. 10566.
9,718 Knitting loom, J. Mee, F. Cas 9129
9,719 Knitting loom, J. Mee, F. Cas. 9129.
9,721 Printing press, J. Young, F. Cas. 12122.
9,736 Lime kiln, S. Seely, F. Cas. 12632.
9,737 Mowing machine, Wm. F. Ketchum, F. Cas. 8719.
9,765 Door fastening, S. P. Kittle, F. Cas. 7857.
9,776 Letter files, H. L. Smith, F. Cas. 12982.
9,789 Glass manufacture, Brookfield & White, F. Cas. 18131.
9,807 See Reissue 4090
9,810 Propellers, W. F. Tyson, F. Cas, 14320.
9,893 See Reissues 1036, 1037, 1038, and 1039.
9,947 See Reissue 3533.
10,038 See Reissues 723, 724, and 2608.
10,078 Apple-paring machine, E. L. Pratt, F. Cas. 12362; F. Cas. 12364.
10,124 Propeller, E. Beard, F. Cas. 14320.
10,204 Molding machine, N. Gear, F. Cas. 5290, F. Cas. 5291; F. Cas. 5292.

1853 (Concluded) 10,280—12,227

10,280 See Reissue 4202.
10,339 Vulcanizing caoutchouc, L. O. P. Meyer, F. Cas. 11279; F. Cas. 11280; F. Cas. 11281; F. Cas. 11282; F. Cas. 11283.

1854

10,422 Mortising machine, H. B. Smith, F. Cas. 13045.
10,448 See Reissue 1823.
10,459 Harvester, Palmer and Williams, F. Cas. 12688; 11 Wall. 516.
10,467 Cultivator, E. Boughton, F. Cas. 1696.
10,477 Shutter hinge, Lull & Porter, 13 F. 456; 20 F. 454.
10,597 See Reissue 355.
10,741 See Reissue 797.
10,903 See Reissue 3268.
10,965 Sewing machine, Meyers & Eunson, F. Cas. 4443; F. Cas. 9989; F. Cas. 9990; F. Cas. 9991; F. Cas. 10903; F. Cas. 10904; 18 Wall. 414; 94 U. S. 187.
10.967 See Reissues 985 and 986.
10,974 Sewing machine, I. M. Singer, F. Cas. 12900.
10,975 Sewing machine, I. M. Singer, F. Cas. 12900.
11,113 Valve-governor for water-closets, F. H. Bartholomew, F.Cas. 1070.
11,125 Extra yard for topsails, F Howes, F. Cas. 6790.
11,343 See Reissues 1448 and 1449.
11.376 See Reissue 1828,
11,491 See Reissues 1583 and 2748.
11,608 See Reissue 3531.
11,638 Spring roller, B. Bray, F. Cas. 1820.
11,766 Purifying fat bodies, R. A. Tilghman, F. Cas. 14041; F. Cas. 14042; F. Cas. 14043; F. Cas. 14046; 19 Wall. 289; 102 U. S. 707; 125 U. S 136.
11,805 Machinery for forming hat bodies, D. Barnum, F. Cas. 6685.
11.820 Pencil case, J. Richardson, F. Cas. 11783.
11,838 Making wrought iron direct from the ore, J. Renton, F. Cas. 17521.
11,858 Shingle machine, H. H. Evarts, F. Cas 4574.
11,928 Lamp cap, Wm. Bell F. Cas. 1252.
11,971 See Reissue 1562.
12,015 Sewing machine, J. W. Robertson, F. Cas. 4409; F. Cas. 4410; 4 Blatch. 307
12,017 See Reissue 1126.
12,044 See Reissues 875, 877, 878, 879, and 2610.
12,116 Sewing machine, A B. Wilson, F. Cas. 5846; F. Cas. 11333.

1855

12,175 See Reissue 5282.
12,227 Brass kettle manufacture, L. E. Camp, F. Cas. 11072.

12,231—14,481 **1855** (Concluded)

12,231 See Reissue 623.
12,367 See Reissue 2632.
12,492 Candle machine, J. Stainthorp, F. Cas. 13278; F. Cas 13279; F. Cas. 13280; F. Cas. 13281; F. Cas. 13871; F. Cas. 13872.
12,530 Process for curing meats, J. C. Schooley, F. Cas. 11162.
12,535 Vapor apparatus, E. Cunningham, F. Cas. 4060; F. Cas.9934.
12,550 Lamp, E. Harris, F. Cas. 10243; F. Cas. 10244.
12,648 Repeating fire-arms, R. White, F. Cas. 17535.
12,649 Repeating fire-arms, R. White, F. Cas. 17537.
12,678 See Reissue 446
12,682 Steam generator, A. B. Latta, F. Cas. 8116.
12,700 See Reissue 1049.
12,811 See Reissues 1091, 1092, 1093, 1094, and 1095.
12,857 Wood splitting machine, J. A. Conover, F. Cas. 3120; F. Cas. 3122; F Cas. 3123; F. Cas 3124; F. Cas. 3125; F. Cas. 7401; 11 O G. 1111.
12,956 See Reissue 3445.
13,118 Making nuts, I. H. Steer, F. Cas. 2475; F. Cas. 17941.
13,145 Stuffing box packing, J. H. Tuck, F. Cas. 14213.
13,258 Railroad draw, J. K. & W. P Gamble, F. Cas. 13199.
13,286 Lantern, C. Waters, F. Cas. 3792; 3 Biss. 389.
13,364 Railway cars, excluding dust from, E. Salisbury, F. Cas. 13,-369.
13,416 White oxide of zinc manufacture, J. E. Burrows, F. Cas. 2207; F. Cas. 2208.
13,499 See Reissue 1145.
13,523 See Reissue 545
13,563 See Reissue 4027.
13,586 See Reissue 963.
13,606 See Reissue 404.
13,676 Dust deflector, J. M Cook, F. Cas. 3160.
13,802 See Reissue 455.
13,806 White oxide of zinc manufacture, S. Wetherill, F. Cas. 7508; F. Cas 17463; F. Cas. 17464; F. Cas. 17465.
13,927 See Reissue 1272

1856

14,119 Weighing scales, Strong, Ross & Howe, F. Cas. 1810; F. Cas. 11421.
14,133 See Reissue 521.
14,281 Illuminating vault covers, J. B. Cornell, F. Cas. 3237.
14,287 Mole of draining plow, Marquiss & Emerson, F. Cas. 6271.
14,350 See Reissue 2982.
14,405 See Reissue 1312.
14,447 Fire-place, C. Dodge, F. Cas. 3951.
14,481 Carding machine, G. Wellman, F. Cas. 17385.

1856 (Concluded) 14,510—17,331

14,510 See Reissue 5786.
14,585 See Reissue 2415.
14,624 Slate frame, E. Young, F. Cas. 7588.
14,722 See Reissue 2979.
14,740 Tent, H. H. Sibley, Burns' case, 4 Ct. of Claims 113; 12 Wall. 246.
14,818 Washing machine, J. T. King, F. Cas. 7795.
14,845 Machine for sizing and felting hats, J. S. Taylor, F. Cas 6250; 3 O. G. 241.
14,951 Boot trees, C. T. Eames, F. Cas. 4239.
15,044 See Reissue 4281.
15,273 Method of drawing water from wells, H. B. Barber, F. Cas. 9892.
15,292 Fire-arms, J. E. Halsey, F. Cas. 5963.
15,474 See Reissue 978.
15,570 See Reissues 933 and 2257
15,687 Anvil, J D. Cawood, F. Cas. 14270; F. Cas. 14271; F. Cas. 14272; 20 F. 912; 1 Wall. 491; 94 U. S. 695; 110 U. S. 301.
15,693 See Reissue 1322.
15,753 See Reissue 4026.
15,957 See Reissues 2569, 2570 and 2571.
15,995 Breech-loading musket, G W. Morse, 33 F. 170; 27 Ct. of Claims, 363.
15,996 Cartridge, G. W. Morse. 27 Ct. of Claims, 363.
16,030 Sewing machine, I. M. Singer, F. Cas. 12897; F. Cas. 12900; F. Cas. 17610.
16,094 Melodeon, L. Louis, F. Cas. 6004; 92 U S. 724.
16,263 Printing press, G. H Babcock, F. Cas. 698.

1857

16,364 Cultivator teeth, J P. Cramer, F. Cas. 2848; 1 Mac A. Pat. Cases, 473.
16,648 See Reissue 6660.
16,676 Keeper for door locks, C. Adams, F. Cas. 57.
16,700 See Reissue 2311.
16,797 See Reissue 3798.
16,833 Cotton cleaner, I. Hayden, F. Cas. 6261.
16,936 Lathe, W. D. Sloan, F. Cas. 17596.
16 956 See Reissue 1940.
16,961 Treating moss for mattresses, S Barker, F Cas. 9970.
17,023 Pendulum levels, T. A Chandler, F. Cas. 2593.
17 082 Bustles, A. Douglass, F. Cas. 1470.
17,184 See Reissue 920
17,264 Artificial honey, Corbin & Martlett, F. Cas. 3224.
17,331 See Reissue 4870.

1857 (Concluded)

17,387 Paper pulp, M. A. C. Mellier, F. Cas. 320; F. Cas. 321; F Cas. 322; F. Cas. 487; F. Cas. 2074.
17,520 See Reissue 4116.
17,530 Gas burner, J. C. Walsh, F. Cas. 17112.
17,602 See Reissue 501
17,665 Horse shoe machine, H. Burden, F. Cas. 2143.
17,835 Steam packing, Wm. S. Gale, F. Cas. 11241.
17,899 See Reissue 4240.
17,916 Vapor burner, D. H. Carpenter, F. Cas. 5991.
17,990 Reaper, Whitaker & Reed, 2 Wall. 591.
17,999 Brick machine, I. Z. Wagner, F. Cas. 17038.
18,083 See Reissue 554.
18,124 Carding machine, Gambrill & Burgee, F. Cas. 2454.
18,249 See Reissue 4676.
18,526 Steam gauge, E. G. Allen, F. Cas. 4648.
18,546 Ice pitcher, A Hebbard, F. Cas. 6314.
18,635 Lime kiln, Griscomb & Denn. Additional improvement 192 F. Cas. 12751.
18,742 Long trunk for cleaning cotton, I. Hayden, F. Cas. 6261; F. 519; 22 F. 103; 3 Wall. 315.
18,770 Machine for making brooms, S. Rowe, Pitcher's case, 1 Ct. o Claims, 7.
18,874 Bagasse furnace, M. Thompson, F. Cas. 1460; F. Cas. 1465 F. Cas. 1466; 111 U. S. 122.
18,975 See Reissue 3460.

1858

19,074 See Reissue 2511.
19,206 See Reissue 4887.
19,283 Manufacture of sewing silk, H. Kelsea, F. Cas. 6489.
19 347 Flexible gum mat, E. W. Chaffee, F. Cas. 2028.
19,377 See Reissue 3372.
19,412 See Reissue 1515.
19,490 Bale tie, F. Cook, F. Cas. 3155; F. Cas. 8706; F. Cas. 8708 106 U. S. 89.
19,508 Boot tree, R. L. Lewis, F. Cas. 6771; 1 Wall. 78; 1 Wall 317.
19,637 See Reissue 4793.
19.747 See Reissue 2183.
19,783 Lead pencil and eraser, H. L. Lippman, F. Cas. 11625; 92 U S. 347.
19,786 Lathe chuck, J. L. Mason, F. Cas. 3134.
19,824 See Reissue 2406.
19,932 Bonnett frames, W. E. Kidd, F. Cas. 7755.
19,956 Cooking stoves, J. Spear, F. Cas. 13223.
19,984 See Reissue 4712.
20,159 See Reissue 648.

20,249 See Reissue 1299.
20,324 Vapor burner, D. H. Carpenter, F. Cas. 5991.
20,503 Method of transforming muzzle-loaders into breech-loaders, G. W. Morse, 27 Ct. of Claims 363.
20,519 Tailor's pressing machine, L. B. Storrs, F. Cas. 13495.
20,542 See Reissue 2145.
20,616 See Reissue 4731.
20,681 Hoop skirts, R. J. Mann, F. Cas. 4026
20,719 See Reissue 4484.
20,727 Method of making cartridges, G. W. Morse, 27 Ct. of Claims 363.
20,775 Sewing machine, L. R. Blake, 23 F. 76.
21,026 See Reissue 906.
21,029 See Reissue 2829.
21,059 Steam-engines, H. & F. L. J. Blandy, F. Cas. 1528; F. Cas. 1529; F. Cas. 1530.
21,161 See Reissue 4418.
21,172 Machine for folding paper, J. North, 2 Black, 699.
21,286 Tempering wire and steel, H. Waterman, F. Cas. 17260. See Reissue 1874.
21,551 Nut machine, R. H. Cole, F. Cas. 2974.
21,576 See Reissue 3082.
21,659 See Reissue 5180.
21,712 See Reissue 2994.
21,717 Ice pitcher. J. H. Stimpson, F. Cas. 14591.
21,734 Water closet, F. H. Bartholomew, 7 F. 821; 114 U. S. 1.
21,829 Photographic shield, E. Gordon, F. Cas. 5605.
21,856 Stave cutting machine, W. Steele, F. Cas. 1806.
21,879 See Reissue 2166.
22,018 Lacteal instruments, C. H. Davidson, F. Cas. 3606.
22,094 See Reissue 3946.
22,129 Moulds for making bottles, J. L. Mason, F. Cas. 3133; F. Cas. 3134.
22,157 Pipe tongs, J. R. Brown, F. Cas. 580.
22,186 Screw neck bottles, J. L. Mason, F. Cas. 3133; F. Cas. 3134.
22,356 See Reissue 786.
22,439 Locomotive axle bearing, D. Matthew, 8 F. 45.

1859

22,532 Corsets and bustles manufacture, D. Lamoureaux, F. Cas. 5017.
22,539 See Reissue 1934.
22,611 Printing press, C. H. Degener, F. Cas. 698.
22,697 See Reissue 2711.
22,723 See Reissue 2765.
22,787 Stove, P. Dodge, F. Cas. 6382; 2 F. 78.
22,859 Cultivator, J. Dundas, F. Cas. 9119. See Reissue 2380.

22,990 See Reissue 3682.
23,001 Elastic toy, L. P. Porter, F. Cas. 10215.
23,033 Hose coupling, Lawton & Bliss, F. Cas. 1548. See Reissue 3768.
23,263 See Reissue 1606.
23,291 See Reissue 5333.
23,361 See Reissue 3517.
23,694 See Reissue 1062.
23,771 See Reissues 1980 and 5259.
23,950 See Reissue 6580.
23,957 Lathe for turning irregular forms, A. & C. Spring, F. Cas. 13258; F. Cas. 13260; 2 F. 78; 9 F. 505; 21 F. 630; 134 U. S. 388.
24,022 Sewing machine, J. Gray, 31 F. 342.
24,076 Wood plane, T. P. Butterfield, anticipates 367,267, 60 F. 87.
24,104 Hominy machine, Wm. Davis, F. Cas. 3617.
24,162 Weighing scales, Strong, Ross & Howe, F. Cas. 1810; F. Cas. 11421.
24,307 Construction of prisons, E. Jacobs, 7 Wall. 295.
24,720 Skirt supporter, M. Chambers, F. Cas. 2581.
24,734 Paper bag machine, W. Goodale, F. Cas 14392; F. Cas. 14,-393; 97 U. S. 120.
24,748 Paint can, J. M. Masury, F. Cas. 9270; F. Cas. 9271.
24,915 Casting copper cylinders, F. Adams, 26 F. 324; 132 F. 16.
25,061 Elevator, O. Tufts, F. Cas. 14231.
25,098 Mole of drain plows, T. S. Cox, F. Cas. 3302.
25,148 Weighing scales, Strong, Ross & Howe, F. Cas. 1810; F. Cas. 11421.
25,235 Iron manufacture, B. Lauth, F. Cas. 12389.
25,418 Paper pulp boiler, M. L. Keen, F. Cas. 320; F. Cas. 322.
25,484 See Reissue 1826.
25,534 Lightning rod m chine, C. Stearns, F. Cas. 13338.
25,662 Construction of prisons, E. May, 27 F. 691; 29 F. 469; 137 U. S. 395, 408.
25,701 See Reissues 870 and 2046.
25,843 See Reissue 4383.
26,013 See Reissue 1483.
26,108 Fastening for jail doors, E. Jacobs, 7 Wall. 295.
26,114 See Reissue 1211.
26,205 Sewing machine, T. J. W. Robertson, F. Cas, 3879; F. Cas. 3883.
26,268 Paint Can, P. Brown, F. Cas. 2008.
26,329 See Reissue 3070.
26,410 Seed planter, Wm. Blessing, F. Cas. 14132.
26,415 Spool-winding machine, H. Conant, F. Cas. 17763; 24 F.799; 27 F. 865; 140 U. S. 481.
26,500 Iron plate jails, E. Jacobs, F. Cas. 7161.

26,891 Spectacle case catch, G. N. Cummings. F. Cas. 10747.
26,901 Steam-engine, W. L. Gold, 15 Wall. 187.
26,904 Projectiles for fire-arms, Wm. W. Hubbell, 5 Ct. of Claims, 1.
27,094 See Reissue 1948.
27,222 Prisons (joining plates of metal), E. Jacobs, 7 Wall. 295.
27,898 See Reissues 3826 and 3827.
27,899 See Reissues 1869 and 1871.
28,016 See Reissue 3932.
28,130 See Reissue 6397.
28,139 Sewing machine, G. B. Arnold, F. Cas 8948.
28,181 Boot burnishing machine, E. T. Ingalls, F. Cas. 13689; 8 F. 329.
28,196 Syringe, F. B. & B. L. Richardson, F. Cas. 11786.
28,244 Ruffles, G. B. Arnold, F. Cas. 8948; F. Cas. 8949; F. Cas. 8950.
28,314 See Reissue 5154.
28,482 See Reissue 3523.
28,495 See Reissue 6369.
28,633 Marking cloth for sewing machine, H. W. Fuller, F. Cas. 5151; 94 U S. 288; 94 U. S. 299.
28,762 Lamp, R. S. Merrill, 1 Mac Arthur, 301.
28,951 See Reissue 1268.
29,221 Lamp, J. T. Van Kirk, F. Cas 7500.
29 236 File cutting machine, E. Bernot, 8 F. 816.
31 F. 289.
29,282 Prisons, E. Jacobs, 7 Wall 295.
29,534 Lathe, B. D. Whitney. F. Cas 17596.
29 561 See Reissue 9043.
29,562 Boots and shoes, product, L. R. Blake, 5 F 587; 5 F. 593; 12 F. 615; 23 F. 76.
29,576 Pistons and piston packing, H. D. Dunbar, F. Cas. 7959.
29,649 Leather splitting machine, Flanders & Allen, F Cas. 302.
29,785 Sewing machine D. Haskell, F. Cas. 6194.
29,971 Cotton cleaner, I. Hayden, F. Cas. 6261; 3 Wall. 315.
30,092 See Reissue 4488.
30,100 Railway switch, W. Wharton, Jr., 30 F. 826.
30,112 Sewing machine, G. B. & A. Arnold, F. Cas. 8948.
30,140 Locks, J. L. Hall, 107 U. S. 90.
30,191 Paper bag machine, H. G Armstrong, F. Cas. 14387.
30,357 See Reissue 6131.
30,379 Curling hat brims, F. S. Sibley, F. Cas. 4020; F Cas. 4022
30,381 See Reissue 6844
30,441 See Reissue 2626.
30,577 Truss bridges, J. L. Jones, F. Cas. 17451.
30,651 See Reissue 6609.
30,685 Seed drill, H. Moore, F. Cas. 9776; 11 F. 298.
130 U S. 152
30,990 Revolver, Smith & Wesson, F. Cas. 12999.

1861

31,133 Corn cultivator, D. S. Stafford, 1 MacArthur 375.
31,134 Wagon gearing, Stringfellow & Surles, does not anticipa 108085, 145 U. S. 156.
31,147 Steamboat staging, A. J. Bell, F. Cas. 3144.
31,187 Molds for India rubber pencil heads, A. Neill, F. Cas. 578.
31,252 Bale tie, J. J. McComb, F. Cas. 293; F. Cas. 294; F. Cas. 29 106 U. S. 89.
31,626 See Reissue 2005.
31,734 See Reissue 3252.
31,736 Preserving fish, E. Piper, F. Cas. 11180; F. Cas. 11181; Cas. 11182; 91 U. S. 37; 91 U. S. 44.
31,819 Seed drill, H. Moore, F. Cas. 9776; 11 F. 298; 130 U. S. 15
32,180 See Reissue 1514.
32,257 See Reissue 1397.
32,331 See Reissue 1470.
32,370 Paper perforator, G. C. Howard, F. Cas. 14100.
32,441 Elevator, O. Tufts, F. Cas. 14231.
32,521 See Reissue 1390.
32,845 Beer cooler, G. B. Turrell, F Cas. 14266.
32,904 Planing machine. H. D. Stover, F. Cas. 13509.
32,983 Cast-iron ordnance, J. A. Dahlgreen, 16 Ct. of Claims 30.
32,984 Cast-iron ordnance, J. A. Dahlgreen, 16 Ct. of Claims 30.
32,985 Cast-iron ordnance, J A. Dahlgreen, 16 Ct. of Claims 30.
32,986 Projectile, J. A. Dahlgreen, 16 Ct. of Claims 30.
33 071 Ventilator for railroad cars, W. G Creamer, 30 F. 185.
33,270 See Reissue 1456
33,370 Stave machine. W. Sisson, F. Cas. 9332; F. Cas. 12912.
33,384 See Reissue 2707.
33,685 Bed bottom, A. A. Rouillion, F. Cas. 18058.
33,808 See Reissue 4937.
33,978 Bonnets, S. A. Blake, F. Cas 797; F. Cas 804.
34,026 See Reissue 1518.
34,043 Hats, T W. Adams, F. Cas 8993.
34,059 Explosive shell, Wm. W. Hubbell, 5 Ct. of Claims 1.
34,183 Iron truss for bridges, Linville & Piper, F. Cas 7751; 95 U S. 274.

1862

34,252 See Reissue 2682.
34,377 Truck for locomotives, A. F. Smith, F. Cas. 8452; F. Ca 8453; 110 U. S. 490.
34,476 Hose coupling, W. H. Bliss, F. Cas. 1548
34,928 Canning green corn, I. Winslow, F. Cas. 7469; F Cas. 748 F. Cas. 7495; 91 U. S. 171. See 35274 and reissue 706
34,992 Grain elevator and dryer, J. W. Sykes, F. Cas. 13710.
35,030 Padlock, J. W. Lyon, F. Cas. 9589.
35,122 See Reissue 2133.

1862 (Concluded) 35,209—37,726

35,209 Clover huller, J. C. Birdsell, F. Cas. 1433; F. Cas. 1434; F. Cas. 10994.
35,274 Preserving corn, I. Winslow, F. Cas. 7469; F. Cas. 7481; F. Cas. 7495; 91 U. S. 171. See 34,928 and reissue 7061.
35,315 See Reissue 2224.
35,346 Preserving corn, I. Winslow, F. Cas. 7469; F. Cas. 7495.
35,348 Weighing scales, Strong, Ross & Howe, F. Cas. 1810; F. Cas. 11421; 3 Ban. and Ard. 191.
35,390 See Reissue 1527.
35.582 Construction of column, etc., S. Reeves, F. Cas. 11660; F. Cas. 11661.
35,598 See Reissue 7069.
35,842 See Reissue 1651.
35.856 See Reissue 4187.
36,065 Gas retort, W. P. Battey, F. Cas. 18062.
36,107 Preserving animal substances, E. Piper, F. Cas. 11180; 91 U. S. 37; 91 U. S. 44.
36.163 Sewing machine, McKay & Mathies, 23 F. 76.
36.266 See Reissue 2386.
36,292 Shoe-pegging machine, A. C. Gallahue, F. Cas. 5198.
36,326 Preserving corn, I. Winslow, F. Cas. 7469; F. Cas. 7495. See 34,928 and 35274.
36.495 Shoe lasts, N. Jones. F. Cas. 8653.
36.512 Pier for bridge, J. DuBois, F. Cas. 4109; 12 Wall. 47.
37,603 See Reissue 2213.
36.854 See Reissue 3863.
37,033 Cloth crimping machine, Crosby and Kellogg, F. Cas. 4415; 19 F. 599; 62 F. 453; 76 F. 227; 82 F. 744.
37.037 Flasks for casting iron pipes, Firth & Ingham, F. Cas. 13077.
37.052 Repeating gun, C. H. Palmer. 8 F. 513.
37,124 Skirt machine, J. H. Baird, F. Cas. 17641.
37,175 Hand stamp, M. P. Norton, 12 F. 150.

1863

37,317 See Reissue 5841.
37 318 See Reissue 6030.
37,319 Bolting flour, Wm. F. Cochrane, 94 U. S. 781; 95 U. S. 355.
37,320 Bolting flour, Wm. F. Cochrane, 94 U. S. 781; 95 U. S. 355.
37.321 See Reissues 6594 and 6595.
37,433 See Reissue 2487.
37,446 Machine for cutting caoutchouc, L. Hull, F. Cas. 1676. See Reissue 5903.
37,548 Purifying and cleansing sugar, G. A. Jasper, F. Cas. 14398; F. Cas. 14399.
37.550 See Reissue 6565.
37,630 See Reissue 2354.
37,726 Paper bag machine, C. H. Morgan, F. Cas. 14391.

37,835 Saw, W. G. Tuttle, F. Cas. 17500.
37,941 Martingale ring, W. M. Welling, F. Cas. 17382; F. Cas. 383; 97 U. S. 7.
38,002 Corn sheller, T. D. Burrall, F. Cas. 2197.
38,015 Burning fluid, C. N. Tyler, 7 Wall. 327.
38,153 Cylinder polisher, G. Cowing, F. Cas. 3296.
38,175 See Reissue 4143.
38,200 Printing press, Bullock, Adams & Selden, F. Cas. 2132.
38,206 Defensive ship armor, C. W. S. Heaton, F. Cas. 6311; F.C 17324.
38,389 Electric baths, M. W. House, F. Cas. 6738.
38,452 Paper bag machine, S. E. Pettie, F. Cas. 14386; F.Cas.143
38,519 Tray, N. Waterman, F. Cas. 3963; 4 Cliff. 291.
38,664 See Reissue 2309.
38,670 Millstone dressing, J. T. Gilmore, 3 Fish. 522.
38,694 See Reissue 3434.
38,713 Coffin lids, Merrill and Horner, 17 Wall. 453.
38,807 See Reissue 7985.
38,901 Boiler for making paper pulp, M. L. Keen, F. Cas. 320; Cas. 322.
38,924 Box nailing machine, G. Wicke, F. Cas. 17608; 103 U.S.4
38,961 See Reissue 1646.
38,974 See Reissue 7682.
38,987 See Reissue 1821.
39,027 Jelly glass, J. S. & T. B. Atterbury, F. Cas. 638; 3 B and Ard. 174.
39,134 See Reissue 6542.
39,210 Tempering umbrella ribs, A. S. Black, F. Cas. 304.
39,235 See Reissue 3690.
39,280 See Reissue 3909.
39,535 Base burning stove, Treadwell & Hailes, F. Cas. 5904; Wall. 353.
39,546 Heel polishing machine, B. O. Budding, F. Cas. 13689 F. 329; 2 Ban. and Ard. 263.
39,702 See Reissue 2529.
39,889 Caster, C. P. Crossman, F. Cas. 13321.
39,919 See Reissue 2624.
40,084 See Reissue 3218.
40,156 Shoe for car brakes, J. Bing, 4 F. 219; 4 F. 224; 19 F. 5 110 U. S. 229.
40,221 Brick machine, C. Chambers, Jr., F. Cas. 2582.
40,481 See Reissue 2490.
40,507 Manufacturing boxes, J. Sperry, F. Cas. 13238.
40,515 See Reissues 4598 and 4599.
40,584 See Reissues 2087 and 2088.
40,590 See Reissue 3483.
40,777 See Reissue 2667.

1863 (Concluded)

40,789 See Reissue 1935.
40,811 Soda water apparatus, J. H. Blaisdell, F. Cas. 1489; F. Cas. 1490; F. Cas. 1491.
40,874 Amalgamator, Z. Wheeler, 93 U. S. 64.
40,964 See Reissues 2355 and 2356.

1864

41,097 See Reissue 2769.
41,214 See Reissue 1649.
41,232 Grain separator, Ogborn & Free, F. Cas. 12506.
41,395 Envelope machine, G. H. Reay, 15 F. 749.
41,403 See Reissue 2542.
41,452 Marine railway, W. Talbert, 25 Ct. of Claims, 141.
41,471 See Reissue 7886.
41,782 See Reissue 1922.
41,788 See Reissue 3265.
41,887 See Reissue 3576.
41,897 See Reissue 1988.
42,126 Pumps, J. Suggett, F. Cas. 6190.
42,136 Leather ornamenting machine, C. T. Woodman, F. Cas. 17,979; F. Cas. 17981; 10 Wall. 117.
42,153 Sewing silk manufacture, Atwood & Holland, F. Cas. 1243; F. Cas. 9991.
42,292 See Reissue 6550.
42,351 Manufacture of tin cans, E. T. Covell, 39 F. 422.
42,403 Band ruffles, T. Robjohn, F. Cas. 18035; 7 F. 816; 8 F. 429.
42,580 Pitching barrels, Holbeck & Gottfried, F. Cas. 5632; F. Cas. 5633; 8 F. 322; 9 F. 762; 10 F. 471; 13 F. 479; 13 F. 673; 22 F. 433; 104 U. S. 521.
42,520 See Reissue 3747.
42,555 Heel polishing machine, B. O. Budding, F. Cas. 13689; 8 F. 329.
42,572 See Reissue 5701.
42,580 Mode of pitching barrels, Holbeck & Gottfried, 128 U. S. 158.
42,591 See Reissue 2165.
42,842 See Reissue 3335.
42,920 Relief valve for steam fire-engine pump, J. Knibbs, 9 F. 500; 16 F. 477; 35 F. 504; 36 F. 261; 47 F. 515; 81 F. 182; 134 F. 844.
43,009 Artificial gums, J. A. Cummings, F. Cas. 5571a. See Reissue 1904.
43,192 See Reissue 2805.
43,371 Tin can, G. W. Prince, 3 F. 517.
43,378 See Reissue 1804.
43,462 Amalgating barrels, J. Brodie, F. Cas. 1919.
43,463 See Reissue 7556.

43,516 See Reissues 6451 and 6452.
43,636 See Reissue 8391.
43,669 See Reissue 6291.
43,772 See Reissue 2124.
43,851 Metallic cartridges, J. C. Howe, 15 F. 256; 23 Ct. of Claims, 477.
43,858 See Reissue 5713.
43,979 See Reissue 7609.
43,987 Chain stretching machine, C. Hall, F. Cas. 5926.
44,073 See Reissue 4317.
44,129 See Reissue 2429.
44,145 Apparatus for roasting and reducing ores, G. W. White, 144 U. S. 629.
44,249 See Reissue 1825.
44,528 See Reissue 4072.
44,561 See Reissues 2160 and 3618.
44,624 See Reissue 2756.
44,684 Bottle stopper, A. Albertson, 18 Blatch. 356; 6 F. 874.
44,731 See Reissue 7643.
44,740 Brake for hoisting apparatus, C. R. Otis, 27 F. 550.
44,960 See Reissue 2092.
45,106 Car-brake shoe, J. Wood, 15 F. 462.
45,201 Gas and water pipes, A. Wyckoff, 27 F. 656; 40 F. 887; 149 U. S. 355.
45,296 See Reissue 4831.
45,334 Wrench, D. M. Moore, 4 F. 539.
45,422 Sewing machine, McKay & Blake, 23 F. 76.
45,462 Cannon shell, J. L. Henry, 38 Ct. of Claims, 635.
45,590 Pail-graining machine, R. & A. Cross, 10 Wall. 133.
45,647 Oil well pump, W. Shoup, F. Cas. 12814.

1865

45,803 Desulphurizing ores, M. B. Mason, F. Cas. 5508.
45,957 Coal oil stove, W. B. Billings, F. Cas. 3288.
45,998 See Reissue 2034.
46,027 See Reissue 2260.
46,217 See Reissue 7772.
46,287 Apparatus for calcining ores, G. W. White, 144 U. S. 629.
46,300 See Reissue 2951.
46,424 See Reissue 6566.
46,495 See Reissue 2684.
46,507 Flexible tubing, W. B. S. Taylor, F. Cas. 13778.
46,553 See Reissue 3217.
46,568 See Reissue 2587.
46,615 See Reissue 6384.
46,629 Corn planter, G. I. Bergen, 22 F. 781; 22 F. 787.
46,705 See Reissue 8252.

46,871 See Reissue 4196.
47,107 Paper collar, J. H. Hoffman, F. Cas. 6578.
47,133 Oil well pump, J. B. Root, 11 F. 729.
47,135 Clasp for pocket-books, C. Seaver, 7 F. 914.
47,385 Soap manufacture, Bennet & Gibbs, 19 F. 323.
47,458 Explosive, E. A. L. Roberts, F. Cas. 11910; 2 F. 855; 14 F. 167.
47,551 Lantern, J. H. Irwin, 19 F. 317; 22 F. 656.
47,574 See Reissue 8829.
47,764 Snap hook for harness, C. B. Bristol, 8 F. 588.
47,773 Steam hoisting apparatus, C. R. Otis, 27 F. 550; 121 U. S. 478.
47,938 Wool-oiling apparatus, Earl & Holcraft, F. Cas. 4242.
48,036 Paper bag, Arkell & Smith, F. Cas. 532.
48,048 See Reissue 3869.
48,300 Bottle stopper, E. D. Moyer, F. Cas. 6461.
48,366 See Reissue 3665.
48,407 Self-closing faucet, N. Jenkins, F. Cas. 18200; 2 F. 229; 9 F. 101; 13 F. 475; 110 U. S. 200.
48,555 Door bolt, Wm. H. Hart, F Cas. 13289.
49,129 See Reissue 6337.
49,140 See Reissue 4608.
49,290 See Reissue 9422.
49,349 Machine for forming welts, B. M. Lyon, 11 F. 588.
49,414 Steam valve, J. Johnson, F. Cas. 7271.
49,469 See Reissue 7077.
49,502 Purifying coal oil, R. A. Chesebrough, F. Cas. 10042.
49,572 Mode of cutting boot and shoe soles, J. H. Walker, F. Cas. 17083.
48,728 Process of imparting age to wines, J. Searle, 124 U. S. 60.
49,903 See Reissue 7244.
49,948 Car-brake shoe, J. Christy, 4 F. 219; 4 F. 224; 15 F. 462; 19 F. 514.
49,951 Paper bag machine, E. W. Goodale, F. Cas. 14389; F. Cas. 14390.
49,984 Lamps, M. H. Collins, F. Cas. 17100; 9 Blatch. 65.
49,992 See Reissue 6648.
50,073 See Reissue 6709.
50,255 See Reissue 9028.
50,318 Device for arranging tapes, M. B. Westhead, F. Cas. 5504.
50,364 See Reissue 5294.
50,518 Running gear of railroad car, H. H. Trenor, 56 F. 503.
50,591 Lantern, J. W. Irwin, F. Cas. 54; 19 F. 317; 22 F. 656; 28 F. 360; 141 U. S. 539
50,602 Device for bending wood, G. Kriebel, anticipates 243,917, 80 F. 518.
50,614 Sinking wells, B. Mudge, 103 U. S. 660.

231

50,617—53,883 **1865** (Concluded)

50,617 See Reissues 4818, 4819, 5798, and 5800.
50,626 Apparatus for making extracts from tan bark, S. M. Pingree, F. Cas. 1857; F. Cas. 1858.
50,723 Wrought iron bridges, Linville & Piper, F. Cas. 7751; 95 U. S. 274.
50,860 See Reissue 8490.
50,919 Oil well pump, Dickerson & Stuber, 11 F. 737.
50,938 See Reissue 6833.
51,085 Coal stove, Rathbone & Hailes, 16 F. 240; 123 U. S. 582.
51,145 See Reissue 5804.
51,167 See Reissue 8491.
51,292 See Reissue 5435.
51,310 Saw-mills, P. Hamilton, F. Cas. 5982; F. Cas. 5984; F. Cas. 5985; F. Cas. 5988; 4 F. 428; 92 U. S. 426.
51,364 Mowing machine, J. B. Tinker, 1 F. 138.
51,379 Knife for removing corn, I. Winslow, F. Cas. 7479; 11 F.597.

1866

51,928 See Reissue 5718.
51,991 See Reissues 3117 and 3118.
52,008 Cleaning cotton etc., E. Lord, 24 F. 801.
52,015 Amalgamator, F. G. Belknap, F. Cas. 3186.
52,169 See Reissue 6714.
52,439 See Reissue 4071.
52,448 See Reissue 8786.
52,726 See Reissue 4698.
52,730 Capstans, J. S. McMillin, F. Cas. 8902; 1 F. 722; 18 F. 260.
52,763 Bristles machine, N. H. Spafford, F. Cas. 17659.
52,779 Paste, J. Woodward, F. Cas. 18008.
52,835 See Reissue 4296.
52,925 Breech loading fire-arms, H. Berdan, 25 Ct. of Claims 356; 26 Ct. of Claims, 48; 156 U. S. 552.
52 960 Rock drill, Brooks, Gates & Burleigh, F. Cas. 2166.
52,972 Sheet metal can, E. T. Covell, 39 F. 422.
53,003 See Reissue 7262
53,011 Peat machine, T. H. Leavitt, F. Cas. 8170.
53,075 Landau carriage doors, F. Wood, F. Cas. 17967.
53 251 See Reissue 4006.
53,345 Hay elevator, S. Rogers, F Cas. 10099; 13 F. 451.
53,584 See Reissue 4165.
53,630 Piston, E. Y. Kneeland, 2 F. 901.
53,633 See Reissue 3861.
53,668 Storage battery, G. G. Percival, does not anticipate 337,298 and 337,299, 41 F. 679.
53,706 See Reissue 6338
53,794 See Reissue 2261.
53,883 Molding and casting, G. Ross, F. Cas. 13077.

53,927 Sewing machine for hat linings, Sanford & Wheeler, F. Cas. 12313; F. Cas. 12314.
54,033 Bristle machine, N. H. Spafford, F. Cas. 17659.
54,034 Bristle combing machine, N. H. Spafford, F. Cas. 17659.
54,170 Knife for removing corn, J. W. Jones, F. Cas. 7479; 11 F. 597.
54,323 Bustles, L. H. Fay, F. Cas. 5018; F. Cas 5019.
54,554 See Reissue 3579.
54,649 Excavator scoop, A. Morris, F. Cas. 9836.
54,860 Mop head, Clarke & Garretson, F. Cas. 5248; F. Cas. 5249; 111 U. S. 120.
54,938 See Reissue 9247.
55,299 Manufacture of type, T. S. Hudson, F. Cas. 6834.
55,469 See Reissue 4349.
55,598 Governing steam boilers, J. Ashcroft, F. Cas. 2573a.
55,614 See Reissue 8854.
55 630 Shovel plow, P. Dennis, F. Cas. 3795.
55,901 Parlor skate, J. L. Plimpton, 3 F. 333; 14 F. 919.
56,102 See Reissue 2909.
56,166 Improved tool, B. Boardman, 19 F. 498.
56,259 Soap manufacture, C. C. Parsons, 15 F. 600.
56,261 Buttons, C. M. Platt, F. Cas. 11222.
56,345 See Reissues 3624 and 5216.
56,365 See Reissue 3856.
56,569 Hat rack, C. H. Keener, does not anticipate 135,899, 35 F. 205.
56,587 Metallic paper fastener, G. W. McGill, 108 F. 238; 108 F. 987.
56,686 See Reissue 3815.
56,737 Paper cuffs, A. Evans, F. Cas. 14395.
56 793 Ore-crusher, H. Pierce, 42 F. 49; 153 U. S. 332.
56,801 Traveling bag, W. Roemer, F. Cas. 11997; 95 U. S. 214.
56,812 See Reissue 8986.
56 869 Augur machine, R. Jennings, F. Cas. 7283.
56,906 Machine for unloading railroad cars, J. Dable, 42 F. 686; 137 U. S. 41.
57,057 Injector for boiler, J. Gresham, 2 F. 229.
57,232 Machine for pouncing hat bodies, Wheeler & Manley, F. Cas. 10246.
57,245 Lamp. W. Beschke, F. Cas. 579.
57,271 Coating metals with metal, J. Adams, Jr., F. Cas. 14405.
57,443 Billiard register, Miller & Reichert, F. Cas. 11535.
57,574 See Reissue 4696.
57,585 Shuttle-carrier for sewing machines, J. Shellenberger, 38 F. 586.
57,605 Hominy mill, J. A. Welsh, held not to infringe reissue 10057, 26 F. 636.

1866 (Concluded)

58,020 See Reissue 7321.
58,294 Steam safety valve G. W. Richardson, 7 F. 768; 14 F. 732; 26 F. 319; 44 F. 67; 113 U. S. 157; 119 U. S. 45; 141 U. S. 441.
58,437 Bed fastening, J. Lemmen, F Cas. 6228.
58,447 Locomotive wheels, E. Mellon, 114 U. S. 112.
58,612 See Reissue 8986.
58,901 Dental rubber, E. L. Simpson, F. Cas. 5571.
58,962 See Reissue 3727.
59,144 See Reissue 4896.
59,286 Bristle machine, N. H. Spafford, F. Cas. 17659.
59,319 See Reissue 7494.
59,375 Boots and shoes, Evory & Heston, F. Cas. 4582; F.Cas.4583; 2 F. 542; 15 F. 112; 41 F. 48; 133 U. S. 349.
59,458 See Reissue 7149.
59,603 Letter blocks, S. L. Hill, F. Cas. 6493.
59,733 See Reissue 2598.
59,913 See Reissue 3938.
59 915 See Reissue 7972.
59,936 Method of increasing capacity of oil wells, E. A. L. Roberts, F. Cas 11899; F. Cas. 11912. See Reissue 6258.
59,993 Milk cooling can, does not anticipate 187,516, W. Garrard, 56 F. 143.
60,151 See Reissue 6326.
60,196 Baling press, W. R King, F. Cas. 7798.
60,442 Elevator, O. Tufts, F. Cas. 14231.
60,476 See Reissue 4066.
60,606 Whip, E. F. Woodbury, F. Cas. 13543.
60,657 See Reissue 3323.

1867

61,172 Binding for skirt, T. B. De Forest, 2 F. 544; 2 F. 570.
61,207 See Reissue 4334.
61,480 Bristle combing and assorting, N. H. Spafford, F. Cas. 17659.
61,482 See Reissue 6697.
61,628 See Reissue 7129.
61,680 See Reissue 5223.
61,796 See Reissue 3094.
61,900 See Reissue 5366.
62,231 Sand box for carriage axles, J. S. Steele, 23 F. 36.
62,232 See Reissue 6350.
62,342 See Reissue 6050.
62,378 See Reissue 8091.
62,406 See Reissue 5641.
62,492 See Reissues 3000 and 3001.
62,807 See Reissue 3438.

63,104 Match box, Schoerken, 7 F. 469.
63,220 Machine for soldering metal cans, E. T. Covell, 39 F. 422.
63,229 Burning oil, H. C. DeWitt, 97 U. S. 506.
63,353 Looms, C. Zwicki, 19 F. 600.
63,418 See Reissue 5544.
63,419 Bond and coupon register, F. Munson, 3 F. 338; 11 F. 72; 16 F. 560; 19 F. 313; 124 U. S. 601.
63,480 Lantern, A. R. Crihfield, 21 F. 514.
63,770 See Reissue 2845.
63,889 Hotel register, C. L. Hawes, F. Cas. 6234; F. Cas. 6236; F. Cas. 6237.
63,917 Capstan, J. S. McMillin, F. Cas. 8902; 1 F. 722; 22 F. 169; 112 U. S. 244.
63,924 Hotel register, J. L. Mitchell, F. Cas. 6237.
64,347 Steam heating apparatus, H. Merrill, 20 F. 633.
64,404 Sewing machine tuck creaser, E. Bostock, 21 F. 316; 25 F. 819.
64,410 See Reissue 3442.
64,437 Hose coupling, B. Mee, F. Cas. 17450.
64,910 See Reissue 8672.
64,957 Sash pulley, S. Drum, does not anticipate 126,031, 34 F. 336.
65,019 Conductor, G. B. Simpson, F. Cas. 2991; F. Cas. 2992; F. Cas. 2993; F. Cas. 2993a; F. Cas. 2994; F. Cas. 2995; 19 F. 828; 23 F. 82.
65,186 See Reissue 5007.
65,230 Lamp, J. H. Irwin, F. Cas. 7081; F. Cas. 7082.
65,267 Plastic compound from vegetable fibres, W. H. Pierson, 24 F. 796.
65,573 Horse rake, J. Hollingsworth, 17 F. 645.
65,648 Well tube, S. F. Craig, F. Cas. 3338; F. Cas. 3339; 100 U.S. 226.
65,664 Starch manufacturing machinery, J. J. Gilbert, 18 F. 638, 20 F. 505; 21 F. 878; 24 F. 604.
66,065 See Reissue 7388.
66,130 Manufacture of blanks for carriage thills, J. B. Clark; 7 F. 816; 115 U. S. 79.
66,182 See Reissue 7136.
66,316 Skate, J. Forbes, 15 F. 808.
66 578 Grain drill, J. P. Fulghum, 23 F. 348.
65,664 Manufacture of starch, J. J. Gilbert, 35 F. 212; 42 F. 455.
66,773 See Reissue 7031.
66,938 Rubber head for pencils, J. B. Blair, F. Cas. 12102; 20 Wall. 498.
67,046 Safe doors, J. L. Hall, 107 U. S. 90.
67,117 See Reissue 6976.
67,222 Rolling coulters, J. H. Sherman, 16 F. 658.
67,283 See Reissue 5894.

67,398 See Reissue 6498.
67,470 Pulley, T. A. Weston, F. Cas. 17458; F. Cas. 17459.
67,643 Mop head, O. S. Garretson, F. Cas. 5248; F. Cas. 13792; 111 U. S. 120.
68,248 Stone crusher, Smith & Denniston, F. Cas. 13048.
68,282 Baling hay, C. Brown, 3 F. 898; 10 F. 675.
68,332 See Reissue 9883.
68,361 Shoe buttoner, J. F. Goldwaith, F. Cas. 1956.
68,426 Apparatus for distilling petroleum, B. H. Everest, 23 F. 891.
68,446 Die for swaging, C. Konold, F. Cas. 7925.
68,502 See Reissue 7370.
68,595 Knitting machine, D. Bickford, 2 F. 214.
68,633 Mold for making glass goblets, J. Magoun, F. Cas. 8960.
68,652 Boot and shoe shanks, Rice & Rice, 62 F. 393.
68,656 Hose coupling, O. Salgee, 7 F. 350.
68,673 Gang plow, H. J. Wattles, 36 F. 908.
68,674 See Reissue 8826.
68,808 See Reissue 8719.
69,176 See Reissue 7367.
69,181 Buckle, E. Cole,(2nd, 3rd and 4th claims infringed by Reissue No. 8541), 32 F. 225.
69,189 Shade roller, J. David, 119 U. S. 664.
69,255 See Reissue 7497.
69,629 Suspender, C. H. Cleveland, F. Cas. 2888.
69,713 See Reissue 7988.
69,789 Wagon reach, E. F. Flood, F. Cas. 4877; 2 Biss. 169.
70,063 Mechanical movement, E. Allen, F. Cas. 6502.
70,075 See Reissue 8581.
70,309 See Reissue 6567.
70,324 Truss and supporter, S. Dike, F. Cas. 4325.
70,447 See Reissue 3204.
70,627 See Reissue 5400.
70,728 See Reissue 8076.
70,773 Printing press, E. Allen, F. Cas. 6502.
71,241 See Reissue 3243.
71,244 Air heating furnace, J. M. Thatcher, F. Cas. 13864; 1 F.411.
71,560 See Reissue 3609.
71,643 Salt bottle caster, G. B Richardson, F. Cas. 13321; 10 F.555.
71,680 See Reissue 3143.
71,873 See Reissue 9881.
72,061 Process for refining and converting cast iron into cast steel, E. & P. E. Martin, 24 F. 367.
72,110 See Reissue 3274.
72,324 Comb, W. Pauly, F. Cas. 7025.
72,360 Dredge-boat, E. L. Brady, F. Cas. 1794; F. Cas. 1795; 107 U. S. 192.
72,505 Bung cutter, J. Kirby, 1 F. 604; 5 F. 801.

1867 (Concluded) 72,946—76,993

72,946 Reversible locks and latches, R. L. Webb, F. Cas. 12166; F. Cas. 12167.

1868

72,969 Revolving cue rack, E. Brunswick, 135 U. S. 228.
72,988 Trunk, J. S. Eaton, 17 F. 736.
73,012 Lamp, J. H. Irwin, F. Cas. 7081; F. Cas. 7082. See Reissue 8611.
73,255 Pens, Wm. A. Morse, F. Cas. 9862.
73,259 See Reissue 9732.
73,279 Bit stock, C. H. Amidon, F. Cas. 9599.
73,425 See Reissue 4372.
73,524 Millstone dressing, S. Golay, 3 Fish. 522.
73,684 Coal wagon, J. H. Wood, 1 F. 851. See Reissue 9368.
73,697 See Reissue 7368.
73,938 Apparatus for cleaning privies, L. Straus, F. Cas. 10436; 12 F. 788.
73,943 Printing press, E. Allen, F. Cas. 6502.
74,068 Sheet metal molding machine, V. Fischer, F. Cas. 4812; 6 F. 63; 6 F. 76, 6 F. 86; 6 F. 89; 6 F. 92; 6 F. 96; 16 F. 469; 22 F. 92; 22 F. 529.
74,284 Children's carriage, Bein & Ulrich, F. Cas. 11792.
74,328 See Reissue 3247.
74,342 Harvester, A. B. Graham, 11 F. 138; 11 F. 859; 33 F. 917; 129 U. S. 1.
74,379 See Reissue 6902.
74,392 Hats, G. Mallory, 11 F. 887; 20 F. 116; 25 F. 827.
74,435 See Reissue 7382.
74,515 See Reissue 8589.
74,613 See Reissue 3744.
74,672 Spring for hoop skirt, DeForest & Gilbert, F. Cas. 18160.
74,723 See Reissue 8521.
74,862 Street pavement, H. W. Stow, F. Cas. 13512.
75,217 Exercise apparatus, G. H. Taylor, F. Cas. 13808.
75,218 Exercise apparatus, G. H. Taylor, F. Cas. 13808.
75,344 See Reissue 6990,
75,383 Harvester, J. S. Davis, 24 F. 739.
76,343 See Reissue 4533.
76,394 Dummies for clothing, W. E. Brock, 13 F. 672.
76,491 Metal tenon for blind slats, McFarland & Campbell, 23 F. 150.
76,646 Conductor's register, Wm. C. McGill, F. Cas. 11535.
76,654 See Reissue 4588.
76,760 See Reissue 8475.
76,773 See Reissue 5951.
76,834 See Reissue 4864.
76,993 See Reissue 3810.

721

77,482 See Reissue 5067.
77,512 See Reissue 4695.
77,706 See Reissue 7042.
77,715 Sewing machine, C. Chabot, F. Cas. 2567.
77,878 Grain binding harvester, J. F. Gordon, 38 F. 593; 150 U. S. 47.
77,920 Machine for treating raw hides for belting, H. & L. Royer, 28 F. 850; 29 F. 358; 45 F. 51; 135 U. S. 319; 155 U. S. 565.
77,933 Exercise apparatus, G. H. Taylor, F. Cas. 13808.
77,938 See Reissue 5940.
78,317 See Reissues 5799 and 10267.
78,320 Starch tray, J. A. Owens 10 F. 835; 18 F. 638.
78,644 See Reissue 5207.
78,653 Handle for cross-cut saws, P. Donoughe, 27 F. 742.
78,769 See Reissue 5624.
78,829 Hoisting machines, H. J. Reedy, 23 Wall. 352.
78,854 Pump, W. Adair, 4 F. 441; 7 F. 920.
78,880 Band saw guide, J. Lemman, 109 U. S. 408.
78,932 See Reissue 3119.
78,958 Construction of drilling jars, E. Guillod, 25 F. 103; 25 F. 105.
79,279 Lubricator, H. Taylor, F. Cas. 10913.
79,528 Mill-gearing, S. Benson, Comm'rs Decisions for 1870, p. 65.
79,534 Baby jumper, G. H. Mellen, 11 F. 903.
79,661 Lumber drier, Johnson & Sumner, 20 F. 835.
79,958 See Reissue 7659.
79,989 Gas heater, H. Y. Lazear, 103 U. S. 250.
80,121 See Reissue 6423.
80,235 Guard plate for stove, Stuart & Wenyss, F. Cas. 13556.
80,269 Sewing machine tuck creaser, E. Bostock, 25 F. 819.
80,276 Machine for unloading railroad cars, J. Dable, 42 F. 686; 137 U. S. 41.
80,441 Copper-lined bath-tub, C. A. Blessing, 34 F. 753.
80,492 Still water dam, S. Lewis, F. Cas. 2345; 94 U. S. 225. See Reissue 6249.
80,774 See Reissues 4509 and 4510.
81,010 See Reissue 3570.
81,132 Feed water heater for steam fire-engines, W. A. Brickill, 7 F. 479; 49 F. 372; 50 F. 274; 52 F. 737; 57 F. 216; 67 F. 331; 98 F. 113; 112 F. 65.
81,432 See Reissue 5487.
81,743 See Reissue 5925.
81,883 Construction of wagon and carriage wheels, M. J. Dawkins, 42 F. 455.
81,888 Starch separator, C. Gilbert, 10 F. 835; 18 F. 638; 20 F. 505; 21 F. 878; 24 F. 604.
81,948 See Reissue 7571.

1868 (Concluded) 82,049—87,163

82,049 Self-balancing centrifugal machine, D. M. Weston, does not anticipate 253,572, 54 F. 693.
82,130 Plow, J. Lane, 49 F. 454.
82,262 See Reissue 8784.
82,451 Harrow, J. J. Thomas, anticipates 120,195, 28 F. 623.
82,580 Window sash holder, F. Babcock, 1 F. 408. See Reissue 9301.
82,606 See Reissue 4289.
83,283 Gang plow, H. R. Huie, F. Cas. 2472.
83,405 See Reissue 4212.
83,497 Wagon reach, P. Hicks, 18 Wall. 670.
83,909 Sewing machines for embroidering, A. Bonnaz, F. Cas. 3240.
83,910 Sewing machines for embroidering, A. Bonnaz, F. Cas. 3240; 17 F. 83.
83,924 See Reissue 4653.
83,925 Bronzing leather, M. S. Cahill, F. Cas. 2290; F. Cas. 2291.
83,910 Sewing machine for embroidering, A. Bonnaz, 131 U.S. 159.
84,062 See Reissues 7035 and 7036.
84,517 Pallets of clock escapements, S. B. Terry, F. Cas. 2028; F. Cas. 13840.
84,627 See Reissue 8801.
84,803 Scoops, T. B. Davis, 19 F. 99.
85,373 Oil-stove, A. H. Emery, held to anticipate Cl. 2 of 230,850, 26 F. 270.
85,374 Screw peg for boots and shoes, J. M. Estabrook, F. Cas.4535.
85,472 See Reissue 6274.

1869

85,526 See Reissue 8099.
85,598 Adjustable still water dam, S. Lewis, F. Cas. 2345.
85,602 Excavator, A. Morris, F. Cas. 9836.
85,814 See Reissue 4106.
85,963 Steam safety valve, G. W. Richardson, 7 F. 768; 14 F. 732; 26 F. 319; 44 F. 67; 81 F. 384; 113 U. S. 157; 119 U. S. 45.
86,057 Sewing machine for sewing parallel seams, F. P. Canfield, 86 F. 906.
86,112 Harness saddle pad, R. C. Sturges, F. Cas. 316.
86,115 See Reissue 3612.
86,152 Boiler injector, J. T. Hancock, 19 F. 918; 21 F. 911.
86,277 Railroad ticket case, F. Brewster, 27 F. 93.
86,296 Vulcanized rubber packing, D. C. Gately, 27 F. 362. 141 U. S. 332.
86,440 School desk, J. Peard, 23 F. 507.
86,549 Lamp, J. H. Irwin, F. Cas. 7081; F. Cas. 7082.
86,841 Coating compound, Kendall & Trested, F. Cas. 804.
87,163 Rendering wooden bungs impervious, P. Geier, F. Cas. 5299.

87,241 Reed organ, R. Burdett, F. Cas. 2145; F. Cas. 2146; 3 F.566; 109 U. S. 633.
87,359 See Reissue 8883.
87,413 See Reissue 5132.
87,628 Wind wheel, A. P. Brown, F. Cas. 3142.
87,853 Mosaic floor, J. G. Kappes, 23 F. 187.
87,950 Printing press, A. H. Marinoni, 1 F. 597.
88,216 See Reissue 3633.
88,287 See Reissue 7706.
88,318 See Reissue 6693.
88,365 See Reissue 5150.
88,413 Gang plow, J. G. Robinson, 22 F. 428.
88,436 Breech-loading fire-arms, H. Berdan, 25 Ct. of Claims 356; 26 Ct. of Claims 48.; 156 U. S. 552.
88,439 See Reissue 9909.
88,528 Street letter box, S. Strong, 28 Ct. of Claims 41.
88,557 See Reissue 7738.
88,660 See Reissue 7913.
88,765 Block pavement, De Golyer, F. Cas. 13512.
88,830 See Reissue 6117.
88,844 See Reissue 4994.
88,929 See Reissue 5504.
88,971 Seeder and planter, E. G. Matthews, F. Cas. 6595; F. Cas. 6596.
89,025 See Reissue 6386.
89,233 Elevated railway, R. P. Morgan, Jr., 14 F. 648.
89,304 See Reissue 9252.
89,531 Artificial ivory, Wm. M. Welling, 21 F. 707.
89,620 Metallurgic furnace, A. G. Bevin, F. Cas. 1379.
89,646 Horse collar pad, C. J. Fisher, 113 U. S. 213.
89,770 Lamp, J. H. Irwin, F. Cas. 7082. See Reissue 8598.
89,974 Railroad car ventilator, W. G. Creamer, 30 F. 185; 35 F. 207.
90,143 See Reissue 7006.
90,268 See Reissue 3976.
90,284 Hydrocarbon oils, J. Merrill, F. Cas. 9472; 94 U. S. 568.
90,334 Curing fish, J. Atwood, F. Cas. 3444; F. Cas. 3446; 1 F.140; 12 F. 627.
90,443 Composition for artificial ivory, S. Gradewitz, 2 F. 570.
90,506 Steam boiler, B. Crawford, 34 F. 339.
90,577 Cracker machine, J. Repetti, 30 F. 619.
90,584 Step cover, J. Roberts, 106 U. S. 39.
90,902 Shoe nail, H. F. Whidden, 4 F. 543; 4 F. 545.
90,930 Siphon pump, H. Coll, 12 F. 136.
91,108 Postage stamp, A. C. Fletcher, F. Cas. 4866; 19 O. G. 221.
91,133 Preparing paper for roofing, J. Howard, F. Cas. 6754.
91,144 Cultivator, E. G. Matthews, F. Cas. 6595; F. Cas. 6596.
91,150 Tool for cutting glass, S.G.Monce, F. Cas. 9705; F. Cas.9706.

91,201 Pipe reamer and squarer, Wm. Barry, 22 F. 396.
91,474 See Reissues 4137 and 4138.
91,601 Process of sweating and curing tobacco, Burdick, Chase & Isherwood, 31 F. 39.
92,146 See Reissue 6424.
92,275 See Reissue 8896.
92,355 Manufacture of nails, A. M. Polsey, 19 F. 819; 27 F. 450.
92,379 Rocking chair, C. Singer, 14 F. 38.
92,718 Injector, Wm. Glass, F. Cas. 12426.
92,820 See Reissue 4361.
92,822 See Reissue 7254.
92,942 Hand mirror, W U. Dudley, F. Cas. 4882.
93,096 Spring bed bottom, A. Kneppler, 24 F. 785.
93,157 Electro-deposition of nickel, I. Adams, F. Cas. 14406; F.Cas. 14407; F. Cas. 14408; F. Cas. 14410; 15 F. 739; 17 F. 340; 25 F. 475; 36 F. 187.
93,215 See Reissue 9123.
93,244 Feed water feeder, E. R. Stilwell, F. Cas. 13453.
93,267 Apparatus for carburating air, Gilbert & Barker, F. Cas. 5416.
93,268 Carburating air apparatus, Gilbert & Barker, F. Cas. 5417; F. Cas. 5418.
93,322 Street car, Madison & McLaughlin, 21 F. 574.
93,369 See Reissue 4091.
93,391 Revenue stamp for barrels, E. A. Locke, 4 F. 83; 113 U.S.59.
93,441 See Reissue 8298.
93,449 See Reissue 5408.
93,472 See Reissue 8443.
93,563 Electrical machine, H. J. Smith, 25 F. 484; 26 F. 149.
93,775 Kindling wood. J. W. Webber, F. Cas. 149.
93,910 See Reissue 3816.
94,013 Removing green corn from the cob, T. S. Lewis, 11 F. 597.
94,062 Wooden pavement, Ballard & Waddell, 12 F. 783; 130 U. S. 87.
94,063 Mode of cutting paving blocks, Ballard & Waddell, 12 F. 783; 130 U. S. 87.
94,064 See Reissue 4192.
94,449 Street letter box, S. Strong, 28 Ct. of Claims 41.
94,469 See Reissue 5274.
94,747 Safety valve, B. Holly, 4 F. 74.
94,780 See Reissue 8740.
94,881 Felt suspender end, T. J. Flagg, F. Cas. 4826; F. Cas. 4830a.
94,947 See Reissue 4777.
95,004 See Reissue 6974.
95,262 Hod elevator. T. M. Pelham, 12 F. 494.
94,203 See Reissue 8597.
95,458 See Reissue 9148.

95,462 Flax drawing machine, J. Good, 33 F. 42.
95,465 See Reissue 4321.
95,466 See Reissue 4780.
95,517 See Reissue 4134.
95,655 Calendar, G. L Coburn, 20 Wall. 246; 107 U. S. 586.
95,689 Machine for preparing paper for roofing, J. Howard, F. Cas. 6754.
96,037 Art of making metallic tubes, J. B. Root, 7 F. 222.
96,249 Oil stove, R. B. Mitchell, 26 F. 262; 26 F. 270.
96,362 Stock-car, J. W. Street, 43 F. 329.
96,500 Stock car, Z. Street, 43 F. 329.
96,605 Biscuit pan, J. C. Milligan, 23 F. 800.
96,778 Folding chairs, N. & C. O. Collignon, 8 F. 912.
96,959 Hydrant casing, Race & Matthews, 105 U. S. 54. See Reissue 10452.
97,178 Machine for pouncing hats, R Eickemeyer, 29 F. 147; 36 F. 317; 148 U. S. 482.
97,236 Side-saddle tree, Grimsley & Shelly, 100 U S. 671.
97,317 Grain drill, J. S Rowell, 28 F. 367.
97,375 Bedstead frame, J. M. Farnham, F. Cas. 18058. See Reissue 7704.
97,418 See Reissue 6100.
97,454 Xyloidine, D Spill, 2 F. 707; 10 F. 290; 21 F. 631; 22 F.94.
97,904 Cartridge loading machine, J. H. Gill, 25 Ct. of Claims 415.
97,920 Fruit jars, D. I. Holcomb, F Cas. 17280.
98,031 Self-cancelling revenue and postage stamps, S. M. Clark, 21 Ct. of Cls 479; 22 Ct. of Cls 335.
98,087 Printing press, C. Montague, F. Cas. 2675; 19 F. 258; 23 F. 880.

1870

98,490 Sectional steam boiler, Griffith, Wundram & Muller, 34 F. 339.
98,505 Spiral furniture spring, S. P. Kittle, 29 F. 508; 33 F. 49.
98,571 Concrete arches for buildings, C. C. Dennett, 109 U. S. 90.
98,622 Permutation lock, J. Sargent, 117 U S. 373.
98,727 Composition resembling horn, Wm. M. Welling, 14 F. 571.
98,787 Brush F. McLaughlin, F. Cas. 9949; F. Cas. 9950.
98,854 Explosive compound, C. Dittmar, 1 F. 342.
98,865 Non-conducting boiler covering, W. Harris, 13 F. 903.
99,032 Covering harness trimming, C. M. Theberath, 3 F. 143; 3 F. 151; 15 F. 246.
99 299 Molds for ingots, P. Doyle, 19 F. 744.
99,425 Knitting machine, Franz & Pope, F. Cas: 5061a.
99,426 Knitting machine, Franz & Pope, F. Cas. 5061.
99,443 Lamp, J. H. Irwin, F. Cas. 7081; F. Cas. 7082; F. Cas. 7085.
99,723 Method of supplying locomotive tenders with fuel or water, A. H. Spencer, 34 F. 899.

99,765 Spring bed bottom, C. H. Dunks, 3 F. 862.
100,053 See reissue 8694.
100,121 See reissue 4223.
100,143 See reissue 8674.
100,229 Sand paper holder for buffing shoes, H L. Willis, 4 F. 325
100,335 See reissue 6206.
100,354 Steam boiler covering, C. A Bauman, 4 F. 816; 13 Blatch.454.
100,399 Registering counter for printing press, J. L. Harley, 39 Ct. of Cls. 105.
100,715 See reissue 7120.
100,839 Friction wheel for gearing, W. D. Andrews, 11 F 414.
101,140 Sewing machine, Lawyer & Gasten, 11 F. 427.
101,175 Xyloidine, D. Spill, 2 F. 707; 21 F. 631; 22 F. 94.
101,295 Children's carriage, G. H. Mellen, 11 F. 903.
101,418 Breech loading fire arm, H. Berdan, 26 Ct. of Cls. 48.
101,529 Die for chord-bar heads, F. Smith, F. Cas. 13002.
101,583 See reissue 4775.
101,590 Wood pavement, T. Cowing, 12 F. 783; 130 U. S 87.
101,814 Automatic relief value, A. M. Black, 26 F 331.
101,931 Leather cutting press, N J. Simonds, 23 F. 897.
101,994 See reissue 5081.
102,179 See reissue 6076.
102,187 Stop valve for petroleum packages, A. Worth, F. Cas, 9397.
102,218 Oil stove holder, H. Brown, 14 F. 353.
102,529 Knitting machine Franz & Pope, F. Cas. 5061a.
102,587 See reissue 6036.
102,662 Process and apparatus for liquid fuel for light and heat, 20 Wall. 546
102 688 See reissue 7320.
102,748 Electrc deposition of nickel, I. Adams, F.Cas. 14406; F. Cas. 14408; 17 F. 340
102,913 Fruit jar, J. L. Mason, F. Cas. 3135; 94 U S. 92.
102,936 Broom, W. S. Hancock, F. Cas. 5434.
103 125 See Reissue 8781.
103,383 Electro magnetic burglar alarm, J. P. Snyder. 29 F. 47.
103,406 Speaking tube whistle, T. J. Woolcocks, F. Cas. 18024.
103,594 Top for rubber shoes, F. Flynn, 23 F. 797.
103,834 Derrick, H. S. Blood, F. Cas. 3144.
104,312 Machine for making paper tubes, C. Hotz, does not anticipate 237,605, 54 F. 703.
104,271 Gas burner, T. Clough, F. Cas. 2906; 106 U. S. 166.
104,318 Tubular lantern, J. H. Irwin, 8 F. 314; 21 F.514; 25 F.491; 27 F. 703; 28 F. 624; 29 F. 447.
104 323 Ore roasting furnace, Knox & Osborn, F. Cas. 7906; F. Cas. 7907; 4 F. 809; 4 F. 813.
104,376 Fire-place heater, J. M. Thatcher, F. Cas 13865; 12 F. 569; 121 U. S. 286.

456

104,412 See Reissues 8466 and 10672.
104,585 Rotary blower, Hardy & Wood, 97 U. S. 224.
105,030 Heel machine for boots and shoes, H. H. Bigellow, 2 MacArthur, 24.
105 124 Hoop-skirt, C. E. Pratt, 26 F. 698.
105,187 Knitting machine, Franz & Pope, F. Cas. 5061a.
105,290 Pipe coupling, W. C Allison, 29 F. 517.
105,338 See Reissues 5928 and 10546.
105,599 See Reissue 4364.
105,768 Gas burner, J. F. Barker, 106 U. S. 178.
105 833 See Reissus 9731.
106,021 Broom, J. H. Anderson, F. Cas. 5434.
106,089 Water closet receiver, Wm. Smith, F. Cas. 13095.
106,094 See Reissue 5514.
106 101 See Reissue 5186.
106 150 Self feeding lubricator, W. Gee, 32 F. 155.
106,157 See Reissue 8675.
107,478 Lubricator, J. Gtaes, 35 F. 509.
106,597 Sieve, R. J. Mann, F. Cas. 72.
107 611 Chute for delivering timber, J. W. Haines, 135 U. S. 584.
107,817 See Reissue 4467.
108,055 Composifion for covering steam boilers, J. Riley, F. Cas. 16-789.
108,085 Wagon gearing, J. B. Augur, 145 U. S. 156.
108,257 See Reissue 4297.
108,270 Spinning ring holder, G. W. Knight, F. Cas. 4073.
108,300 Trunk rollers, A. J. Sessions, 25 F. 825.
108,384 See Reissue 5557.
108,408 Sand blast, B. C. Tilghman, F. Cas. 14039; F. Cas. 14044; 99 U. S. 547.
108,753 See Reissue 5256.
108,827 See Reissue 9176.
108,898 Bottle faucet, H. Fischer, 17 F. 250.
109,372 See Reissue 5806.
109,444 See Reissue 6811.
109,446 Woven wire mattress fabrics, G. C. Perkins, 23 F. 587.
109,577 Machine for soldering can caps, W. B. Bishop, 40 F. 876.
110,070 Attaching button shanks, C. L. Potter, F. Cas. 11340.
110,205 See Reissue 9199.
110,222 See Reissues 5193 and 8876.
110,397 Break-pin for stone grinding mills, J. H. Rusk, 42 F. 49; 78 F. 350; 153 U. S. 332.
110 594 Sewing machine needles, Hopson & Brooks, 32 F. 221.

1871

110 630 Pill manufacture, P. Canhape, 9 F. 44.

110,722 Plow, A. Ball, 20 O. G. 1083.
110,779 Casting car wheels, C. Needham, F. Cas. 10082.
110,803 See Reissue 9572.
110,839 See Reissue 8121.
111,001 See Reissue 8894.
111,403 Cleaning and polishing coffee, S. Thompson, 2 F. 904.
111,564 Ratchet coupling for barges, Patterson & Bishop, 20 F. 641.
111,585 See Reissue 6673.
111,632 See Reissue 8438.
111,798 Chewing gum, T. Adams, F. Cas. 61.
111,881 Lubricator, N. Seibert, F. Cas. 12845; 32 F. 172; 98 U. S. 75.
111,962 See Reissue 4977.
112,137 Copper cable lightning rods, J. R. Fricke, 22 F. 302.
112,400 Hay-knife, G. F. Weymouth, 41 F. 34.
112 594 See Reissue 8688.
112,926 Hollow-tile fire-proof flooring, Johnson & Kreischer, 30 F. 787.
112,930 See Reissue 5174.
112,937 See Reissue 8520.
112,977 See Reissue 8832.
113,055 Dental plates from pyroxyline, Hyatts & Perkins, F. Cas. 2543.
113,239 Packing ice cream, I. Allegretti, 35 F. 424.
113,328 See Reissue 7920.
113,528 See Reissue 5184.
113,612 Electro plating with nickel, I. Adams, F. Cas. 14406.
113,649 See Reissue 8891.
113,651 Turning and boring mill, G. A. Gray, 27 F. 301.
113,832 See Reissue 4479.
114,068 Pressing and stamping sheet metal, I. Van Hagan, F. Cas. 13570
114,624 See Reissue 5563.
114,711 Composition for covering steam boilers, J. Riley, F. Cas. 16-787; F. Cas 16789; 4 F 816.
114,867 Fruit paring machine, R. P. Scott, does not anticipate 232, 371, 55 F 971.
115,207 Vulcanizing apparatus, Hotchkiss & Allerton, 31 F. 824.
115,232 School desk, J. Peard, F. Cas 10050; 23 F. 507.
115,565 See Reissue 6962.
115,667 See Reissue 5506.
115,760 Soldering iron, McMurray & Hollingsworth, 16 F. 471; 63 F. 827.
116,138 See Reissue 6531.
116,266 Method of tempering springs, A. Cary, 24 F. 139; 24 F. 141; 26 F. 38; 27 F. 299; 31 F. 344; 34 F. 392; 147 U.S. 623.
116,411 Hoop skirts, C. C. Carpenter, 27 F. 634.

116,771 Plate holder for camera, J. Stock, anticipates 159,537, 53 F. 545.
116,842 See Reissue 9202.
116,922 Throading sheet metal screws, E. E. Blakeslee, 8 F. 600.
116.935 See Reissue 8590.
117,198 Railway switch, T. Newman, 33 F. 499; 37 F. 147.
117,236 Cap for preserve jars, Taylor & Hodgetts, 27 F. 377; anticipates Reissue 9909, 28 F. 91.
117,255 See Reissue 6675.
117,430 Ore roasting furnace, Knox & Osborn, 4 F. 809; 4 F. 813.
117,627 See Reissue 6319.
117,831 See Reissue 5748.
117,925 Gas pump, W. H. Pollard, F. Cas. 5642; F. Cas. 5643; 105 U. S. 253
118.404 Quilting machine, W. J. Tate, 22 F. 660; 27 F. 306.
118,440 Composition for soap, R. Eastman, F. Cas 4772.
118,517 See Reissue 8759.
118,617 See Reissues 5026 and 5027.
118.622 Cut ring supporter, T. Marsh, F. Cas. 4073.
118.725 See Reissue 6925
119,212 See Reissue 8783.
119.262 Billiard table, E. Brunswick, does not infringe 203,108, 47 F. 218.
119 561 Electric gas lighter, A L. Bogart, 25 F. 484; 26 F. 149.
119,705 Cuspadore, E. A. Heath, F. Cas. 7039; F. Cas. 7040; F.Cas. 16,793a; 7 F. 859; 7 F. 860; 7 F. 869.
119.765 Sling for packages, F. Hohorst, 84 F. 354; 91 F. 655.
119.846 Rifled fire-arms, A. Henry, F. Cas. 6384.
120,057 Magneto electric machine, Gramme & D'Ivernois, 17 F. 838.
120.133 Printing telegraph, H. Van Hoevenberg, 17 F. 234.
120.195 Harrow, E. W. Herendeen, 28 F. 623.
110,638 See Reissue 5050.
120.874 Electrical safe covering, Holmes & Roome, 21 F. 458; 22 F. 341; 33 F. 255.
120,949 Band sawing machine, Doane & McKee, 109 U. S. 408.
120,958 Automatic relief-valve for force pump, J. Garland, 26 F. 331.
121.054 Handle for fruit baskets, J. Knapp, 31 F. 822.
121,119 Ornamenting glass and metal surfaces, G. F. Morse, F. Cas. 14044.
121,158 See Reissue 7690.
121,385 Method of tapping a smelting surface, Keyes & Arents, 31 F. 560; 45 F. 199; 118 U. S. 25; 158 U. S. 150.
121,544 Wooden pavement, R. C. Phillips, F. Cas. 11,100; F. Cas. 11,101; 111 U. S. 604.
121,569 See Reissue 5648.
121,746 Apparatus for drying sand, A. H. Bauman, 19 F. 913.

1871 (Concluded) 121,920—126,394

121,920 Fare-box, J. F. Winchell, 4 F. 531; 107 U. S. 649.
122,001 Furniture spring, J. J. Eagleton, 2 F. 774; 111 U. S. 490.
122,030 See Reissues 6098 and 6099.
122,079 See Reissue 7017.
122,163 Harness-mounting, W. Fawcett, 38 F. 739.
122,172 See Reissue 10057.
122,215 Saw-mill dogs, N. F. Beckwith, 5 F. 203; 9 F. 304; 13 F. 874; 13 F. 879; 16 F. 783; 85 F. 481.

1872

122,360 Base burning steam boiler, A. Catchpole, 35 F. 766.
122,520 Cheese hoop. M. B. Frazer, 12 F. 567; 13 F. 477.
122,545 See Reissue 8541.
122,622 Compartment sleeping car for railways, W. D. Mann, 34 F. 131.
123,142 Heating stove, P. D. Beckwith, 150 U. S. 164.
123,325 See Reissue 7417.
123,466 Saw, J. E. Emerson, 31 F. 911.
123,603 See Reissues 5155 and 5156.
123,625 Sewing machine bobbin, W. L. Fish, 12 F. 495.
123,687 Knitting machine, Franz & Pope, F. Cas. 5061a.
123,670 See Reissue 5549.
123.797 School desk, W. A. Slaymaker, 32 F. 395.
123,811 Paper bag, L. C. Crowell, F. Cas. 14388.
123,927 See Reissue 6113.
123,937 Carriage spring, C. W. Saladee, 145 U. S. 156.
124,011 Tube, D. A. Ritchie, 11 F. 722.
124,180 Cloth cutting machine, A. Warth, F. Cas. 17209a.
124,218 See Reissue 6080.
124,319 Paper box, Beecher & Swift, 19 F. 320.
124,340 Ladies' hair nets, J. Dalton, F. Cas. 3548; 93 U. S. 271.
124.590 See Reissue 8867.
124,867 Rail carrying apparatus, While & Wostenholm, anticipates Reissue 7898, 47 F. 508.
124,878 Derrick, H. S. Blood, F. Cas. 3144.
125,044 Casting copper tubes, J. F. Guthrie, 26 F. 334.
125,098 See Reissue 9309.
125,250 Spring bed bottom, S. B. Andrews, 15 F. 106.
125,269 Wood screw-making machine, J. M. Carpenter, 44 F. 423.
125,329 Portable show and circus seats, D. C. Price, F. Cas. 11413.
125,421 See Reissue 5312.
125,547 See Reissue 8388.
126,031 Sash balance, J. J. Cowell, 34 F. 336.
126,285 See Reissue 9959.
126,347 Fire kindler, D. W. Thompson, 32 F. 281.
126,394 Baling-press, Huntington & Carter, 26 F. 763.

126,446 Breech loader, J. W. Cochran, F. Cas. 14460; 118 U. S. 22.
126,847 See Reissue 10035.
126,938 Ballasting vessels, Demartini & Chertizza, 9 F. 465; 11 F. 728.
126,968 Sand and gravel separator, N. J. Keller, 20 F. 47. See Reissue 6598.
127,045 See Reissues 7203 and 9094.
127,090 See Reissue 6162.
127,098 See Reissue 7046.
127,159 See Reissue 6016.
127,211 Carriage axle turning machine, Aram & Williams, 16 F.236.
127,858 Sizing paper, J. M. Dorlan, 25 F. 816.
127,878 Cultivator coupling, W. Haslup, 32 F. 291; anticipates 190-816, 51 F. 226.
127,933 Steam bell ringer, G. B. Snow, 18 F. 602; 121 U. S. 617.
127,964 Manufacture of soles from hides, C. H. Dedrick, F. Cas. 74.
128,411 See Reissue 8834.
128,460 Sewing machine treadle, A. Brill, 54 F. 380.
128,925 Trunk, A. T. Taylor, 21 F. 124; 145 U. S. 29.
129,018 See Reissue 8615.
129,210 See Reissue 5502.
129,338 See Reissue 6388.
129 346 See Reissue 8163.
129.844 See Reissue 5630.
129,858 See Reissues 6954 and 6955.
129,893 See Reissue 7182.
129,901 See Reissue 8186.
130.440 Cultivator, G. Poling, 9 F. 821.
130,514 Sieve, R. J. Mann, F. Cas. 3693.
130.529 Rolling mill, J. L. Pennock, 1 MacArthur 531.
130.672 See Reissue 6751.
130.770 See Reissue 9743.
130,853 Implement for applying hog-ring, H W. Hill, 27 F. 560.
130,871 Well tubes, R. R. Rouse, F. Cas. 12087.
130,961 Loom for weaving pile fabrics, Wm. Webster, F. Cas. 17338; F. Cas. 17341; F. Cas. 17342; F. Cas. 17343; 39 F. 462; 43 F. 673; 105 U. S. 580.
131,004 Machine for punching and stamping metal, F. M. Huntington, F. Cas. 13570.
131,049 See Reissue 9596.
131.098 See Reissue 6493.
131,089 Paint-can, H. Everett, 39 F. 544.
131,199 Overshoes, I. F Williams, 41 F. 48.
131,200 Overshoes, I. F. Williams, 41 F. 48.
131 201 Rubber overshoes, I. F. Williams, 2 F. 683; 41 F. 48; 49 F. 245; 54 F. 498.
131,217 Printing press, R. M. Hoe, 12 F. 111; 14 F. 914; 25 F. 271.

131,616 See Reissue 5590.
131,695 Fruit jar, J. L. Mason, F. Cas. 3132.
131,913 Street railway, A. Thompson, 41 F. 522.
131,936 See Reissue 6979.
132,074 Boxes, H. R. Heyel, 22 F. 399.
132,111 Hydraulic elevator, T. Stebins, 4 F. 445.
132 112 Safety devices for elevators, T. Stebins, 4 F. 445.
132,128 Corn-sheller, H. A. Adams, F. Cas. 56; 35 F. 580; 151 U.S. 139.
132,208 Glass ware, J. H. Hobbs, 8 F. 91.
132,368 Paper boxes, C. T. Palmer, 7 F. 210.
132,547 Method of cutting out collars, G. K. Snow, F. Cas. 7095.
132,566 See Reissues 8130 and 8316.
132,639 See Reissues 7984 and 8312.
132,849 Machine for making heel-stiffeners, Moore & Rogers, 36 F. 898.
132,909 See Reissue 5651.
133,217 See Reissue 5328.
133,601 See Reissue 6101.
133,898 Machine for dressing flour, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
134,045 See Reissue 6404.
134,105 Uniting paper and cloth, G. K. Snow, F. Cas. 13147.
134,128 Squib for blasting, S. H Daddow, 24 F. 277.
134,244 Paper bags, L D. Benner, F. Cas. 14388.
134,404 Wood pavement, H M. Stow, F. Cas. 13512; 104 U. S. 547.
134,435 Automatic relief valve for fire engines, A. Mayer, 26 F. 331.
134,486 Portable show and circus seats, D. C. Price, F. Cas. 11413.

1873

134,653 See Reissue 6733.
134,690 Isinglass manufacture, J. Manning, 108 U. S. 462.
134,790 See Reissue 7851.
134,978 Sewer grating, H. W. Clapp, 156 U. S. 342.
135,256 See Reissue 9276.
135 621 Heating stove, P. D. Beckwith, 150 U. S. 164.
135,650 Puddling furnace, E. Lloyd, 19 F. 915.
135,815 Carriage step, G. A. Keene, F. Cas. 12101.
135,899 Grain band or bag tie, E. Foote, F. Cas. 4910; 35 F. 205; 42 F. 409.
136,107 Seed scattering machine, J. W. Strowbridge, 27 F. 367.
136,108 Plow, J. W. Swickard, 41 F. 352.
136,340 Machine for forming staple seams in leather, S. W. Shorey, 34 F. 44; 35 F. 203; 38 F. 112; 39 F. 274; 40 F. 383.
136,491 Banjo, C. E. Dobson, 39 F. 276.
136,575 Paint can, J. T. Williams, 39 F. 544.
136,763 Head lining for barrels, G. A. Reed, F. Cas. 11650.

136,801 See Reissue 9307.
137,495 Process of manufacturing flour, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
137,595 Noiseless corrugated metallic rolling shutter, A. Clark, 28 F. 95; 30 F. 372.
137,702 See Reissue 8837.
137,765 Hydraulic jack, R. Dudgeon, 29 F. 248.
137,773 Wad winding machine, A C. Hobbs, does not anticipate 237605, 54 F. 703.
137,786 See Reissue 6021.
137,873 Rubber coated harness trimming manufacture, A. Albright, F. Cas. 147.
137,893 Corset, M. Cohn, F. Cas. 2969; 93 U. S. 366.
137,911 Apparatus for starch manufacture, C. Gilbert, 10 F. 835; 18 F. 638; 20 F. 505; 21 F 878; 24 F. 604; 42 F. 455.
138,034 Apparatus for cleaning cess pools, W. C. McCarthy, 35 F. 360.
138,148 Lock for drawers, E. G. Gory, 37 F. 338.
138,209 Baby jumper, A. F. Spooner, 24 F. 700.
138,243 Lubricator for steam engines, J Gates, 10 F. 677; 32 F. 172; 32 F. 790; 34 F. 33; 34 F. 216; 35 F. 591; 38 F. 600.
138,462 Planing machine, J. P. Woodbury, F. Cas. 17970; 101 U. S. 479.
138,490 See Reissue 9919.
138,491 See Reissue 9920.
139,121 See Reissue 6335.
139,332 Horseshoe nail machine, R. Ross, 32 F. 93.
139,348 See Reissue 6018.
139,365 Printing type, D. W. Bruce, 10 F. 750.
139,583 Stove grate, W. J. Keep, 42 F. 896; 155 U. S. 265.
139,784 See Reissue 8594.
139,820 See Reissue 6169.
139,846 Cartridge box, S. McKeever, 14 Court of Claims 396; 18 Court of Claims 757.
140,020 Bunch and plug tobacco, I. Eppinger, F. Cas. 4505.
140,077 See Reissue 7341.
140,250 Ore stamp feeder, Cusenbary & Mars, 127 U. S. 370.
140 315 Apple parer corer and slicer, Stewart & Campbell, 32 F. 666
140,536 Electric railroad signal circuit, F. L. Pope, 6 F. 603; 114 U. S. 87.
140 619 Cake baking pans, J. B. Firth, 19 F. 312; 32 F. 549.
140,635 Knitting machine, Geo. Merrill, 15 F. 386.
141,357 See Reissue 6480.
141,473 See Reissues 8483 and 10368.
141,580 Glove fastener, L Meyers, 32 F. 670.
141,587 Pump valve, W. Painter, F. Cas. 10436; 12 F. 788.

1873 (Concluded) 141,685—147,442

141,685 Pressure safety device for water pipes, Fay & Cairns, does not anticipate 222803, 59 F. 581; 63 F. 962.
142,154 See Reissue 6315.
142,323 See Reissue 8286.
142,377 Spring bed bottoms, C. H. Dunks, 3 F. 862.
142,661 Black washing molds, J. B. Aston, F. Cas. 13077.
142,810 Street car, J. A. O'Haire, 19 Blatch. 473; 114 U. S. 149.
141,926 Suspenders, B. J. Greely, 28 F. 102.
142,933 Cooking stove, Nation & Little, 110 U. S. 131.
142,934 Cooking stove, Nation & Little, 110 U. S. 131.
142,989 Wagon body, B. Burr, 28 F. 574; 29 F. 428.
143,149 See Reissue 8676.
143,153 See Reissue 8689.
143,306 See Reissue 9290.
143,359 Corset clasp, P. Lippman, F Cas. 12643.
143,396 See Reissue 8364.
143,421 Children's carriage, H. M. Richardson, F. Cas. 11792. See Reissue 10363.
143,600 Manufacture of iron from slag, J. J. Vinton, 104 U. S. 485.
143,770 See Reissue 5785.
143,783 Crimping and folding leather, Platts & Walden, 15 O. G. 827.
143,920 Automatic relief valve for fire engines, A. Mayer, 26 F. 331.
144,164 Saddle-tree, A. Teas, 13 F. 406; 106 U. S. 613.
144,818 Horizontal engine frame, W. Wright, 33 F. 655; 155 U. S. 47.
144,926 Door spring, F. H. Richards, 26 F. 320; 37 F. 691.
145,388 Railroad ticket case, L. J. Blades, 27 F. 93.
145,726 Pressure gauges, G. H. Crosby, 17 F. 85.
145,787 See Reissue 6469.
145,817 Trunk lock, A. V. Romadka, infringes 128925, 145 U.S. 29.
146,012 See Reissues 5868 and 10137.
146,085 See Reissue 7786.

1874

146.120 Water motor, O. J. Backus, 17 F. 350.
146,597 See Reissue 6951.
146.614 See Reissue 6422.
146.632 Lath machine, J. Allen, 38 F. 747.
146,832 See Reissue 8550.
147,045 See Reissue 5774.
147,288 Machinery for molding heel stiffenings, Simonds & Emery, 17 F. 242; 27 F. 511; 39 F. 702.
147,343 Bail-ears for pails, P. Miles, 3 F. 26; 109 U S. 117.
147,423 See Reissues 6683 and 6684
147,442 Chemical fire-extinguisher, J. H. Steiner, 43 F. 306; 52 F. 731; 59 F. 132.

147,492 Core-lifter for annular rock drills, G. Frisbee, 29 F. 288.
147,629 See Reissue 6824.
147,827 Electric arc lamp, M. Day, 44 F. 419.
147,906 See Reissue 7356.
148,094 See Reissue 8562.
148,368 See Reissue 6129.
148,447 Electric elevator indicator, A. Hahl, 14 F. 691.
148,497 See Reissue 9729.
148,538 Transom lifter, J. F. Wollensak, 33 F. 841. See Reissue 10264.
148,566 Punching machine, D. L. Kennedy, 97 F. 807; 101 F. 265; 108 F. 963
148,596 Lawn sprinkler, N. D. Clark, 20 F. 195.
148,675 Ice machine, F. V. De Coppet, 31 F. 469.
148,737 See Reissue 9108.
148,747 See Reissue 5937.
148,765 See Reissue 10067.
149,092 Compositor's copy distributor, C. R. Brainard, 7 F. 349; 19 F. 422.
148,973 Hub, J. D. Olds, 41 F. 698
149,141 Hook attachment for muskets, H. Metcalfe, 23 Ct. of Cls. 335.
149,254 Soda fountains, C. H. Schultz, 33 F. 350.
149,276 See Reissue 6370.
149,480 Umbrella cases, Hurcombe, F. Cas. 10431.
149,589 Fire brick, Lindsay & Kalb, F. Cas. 4976.
149,875 Annealing box, C. A. McNish, 2 F. 899.
149,896 Clothes tag, H. Van Geasen, 22 F. 445.
149,954 Preparing hides for belting, H. Royer, 20 F. 853; 38 F. 113; 40 F. 159; 40 F. 160; 146 U. S. 524.
150,195 See Reissue 9297.
150,305 Finishing tool for boot and shoe edges, J. W. Dodge, 17 F. 513.
150,683 See Reissue 6913.
150,854 Fire brick composition, A. F. Foster, F. Cas. 4976.
150,921 Coal scuttle, S. Whitnum, 4 F. 436.
150,933 See Reissue 6644.
151,158 See Reissue 9772.
151,477 See Reissue 8292.
151,576 Stereoscope, H. Dorr, 41 F. 790; 46 F 526.
151,886 Sewing machine for quilting, M. A. King, 27 F. 306.
151,703 Lantern, J. H. Irwin, 8 F. 314; 21 F. 514; 25 F. 491; 27 F. 703; 28 F. 624; 29 F. 447.
151,705 Belt tightener, S. E. Jewett, anticipates Reissue 7898; 47 F. 508.
151,730 Saddle trees, G. Theobald, 25 F. 556.
152,182 Police nippers, A. P. Baldwin, 32 F. 795; 35 F. 519.

152,560 Plastering hair bale, W. R. King, F. Cas. 7794; 109 U. S. 99.
152,636 See Reissue 7488.
152,649 Preparing tobacco, Wm. S. Kimball, 15 F. 393.
152,760 Hay and grain elevator, D Morey, 29 F 318.
152,864 See Reissue 6321.
153.084 Relief line metal plates for printing, M. Joyce, 30 F. 444.
153,110 Puddling furnace, J. L. Pennock, F. Cas. 10940.
153.225 Harrow, A. B. Spies, 14 F. 696.
153,250 See Reissue 6739.
153 677 Machine for polishing rods, J. Illingworth, 43 F. 828.
153,965 Barbed fence wire, C. Kennedy, 4 F. 900.
154,129 Machine for nailing shoe soles, H. Dunham, 72 F. 60.
154,293 Sulky-plow, W. Starling, 29 F. 790; 49 F. 637; 53 F. 119; 140 U. S. 184.
154,394 Steam bell ringer, C. H. Hudson, does not infringe 127933, 121 U S. 617.
154.400 Curtain fixture, A. H. Knapp, 15 F. 115; 20 F. 790.
154,594 See Reissue 10444.
154.595 Harvester, W. B. Ewart. 30 F. 871.
154,770 Flour dressing machine, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
154.848 Carpet stretcher, W. H Curtis, 27 F. 64.
154.852 Fire-proof column, Drake & Wight, 35 F. 583.
154,900 Machine for cutting grass under water, T. Piper, 26 F. 151.
154,985 Feather duster, G. W. Hibbard, 9 F. 558.
154,989 Lifting jack, J. O. Joyce, 15 F. 260; 127 U. S. 557.
155,077 Glove-fastening, J. F. Field, F. Cas 4765; 19 F. 835; 116 U. S. 187.
155,374 See Reissue 8386.
155,451 Buckboard wagon, R. Knapp, 7 F. 219.
155,534 Skirt protector, H. M. McDonald, F. Cas. 5418; F.Cas.8757; F. Cas. 8767; F Cas. 8768; 4 F. 228; 10 F. 919.
155 543 See Reissue 6606.
155,601 See Reissue 6849.
155,670 Pump for emptying cess-pools, Painter & Keizer, F. Cas. 10-436.
155,806 See Reissue 6662.
155,814 Water closet, W. Stockton, 10 F. 132.
155,874 Seed separator, W. E. Lee, 49 F. 747.
155.962 See Reissue 7014.
156.149 See Reissue 7751
156,193 Reciprocating saw-mill, J. B. Wayne, infringed by 377630, 43 F. 140.
156,195 See Reissue 9493.
156,267 See Reissue 7860.
156,277 Shutter hinge, C. B. Clark, 13 F. 456; 20 F. 454.

156,302 See Reissue 9002.
156,311 See Reissue 6557.
156,352 Making solidified collodion, I. S. & J. W. Hyatt, 42 F. 900.
156,353 Manufacture of celluloid, J. W & I. Hyatt, 26 F. 692; 28 F. 195.
156,429 Sleeve supporter, J. P. Lindsay, 10 F. 907.
156,858 See Reissue 10239.
156,880 Shirt bosom, R. Cluett, 30 F. 921; 140 U. S. 180.
157,002 Electric fire alarm signal box, Z. P. Hotchkiss, 52 F. 468.
157,124 Barbed fence wire, J. F. Glidden, 4 F 900; 24 F. 23; 33 F. 261; 143 U. S. 275.
157,367 Horse-collar, J M. Bright, 23 F. 724.
157,395 Shoe buckle, C. Hersome, 8 F. 327.
157,430 See Reissue 9542.
157,478 Feed mechanism for grain drill, P. P. Mast, 28 F. 367.
157,508 See Reissue 7566.
157,951 See Reissue 8291.
158,249 Ruled paper manufacture, H. D. Cone, F. Cas. 3096.

1875

158,406 See Reissue 7722.
158,482 Plow, W. H. Foye, 13 F. 125.
158,604 See Reissue 7362.
158,869 See Reissue 9046.
158,881 Metallic ceiling, H. Adler, 48 F. 455.
158,967 See Reissue 9289.
158,992 Middlings-purifying machine, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
159,291 Stocking holder, A. Warren, 42 F. 409.
159,409 Broom, W. S. Hancock, 47 F. 901.
159,433 Vessel for containing gases and liquids under pressure, J. Matthews, 21 F. 641.
159,463 Bale tie, I. T. Smith, anticipates 282991, 74 F. 561.
159,467 See Reissue 7583.
159,506 Grain binder, M. L. Gorham, 58 F. 773; 69 F. 371; 169 U. S 606.
159,537 Plate holder for camera, S. L. Bergstresser, 53 F. 545.
159,553 Casting tubular articles, L. P. Rider, 57 F. 597.
159,577 Shoe-shank machine, J. Hyslop, Jr., 23 F. 898.
159,741 Green corn cutters, V. Barker, 11 F. 597.
159,921 See Reissue 7909.
159,995 Torpedo filling machine, D. J. Wolfe, 18 F. 176.
160,684 Knit fabric, Kent & Leeson, 58 F. 374.
160,757 Cable car grip, W. Eppelsheimer, 39 F. 281; 40 F. 760; 42 F. 501.
160,933 Brushes, Wm. Megraw, F. Cas. 9393b.
161,012 Skirt protector, T. D. Day, 2 F. 544.

161,055 Music box, C. Paillard, 29 F. 864.
161,490 See Reissue 8846.
161,568 Signaling drivers on street cars, J. Stephenson, 14 F. 457; 114 U. S. 149.
161,591 Kalsomine, M. B. Church, 26 F. 620; 27 F. 559.
161,659 See Reissue 8276.
161,757 Clasp for hitching devices, J. C. Covert, 38 F. 237; 152 U.S. 516.
161,807 See Reissue 7028.
161,848 See Reissue 7923.
161,968 Spiral punch, D. Kennedy, 97 F. 807; 101 F. 265; 108 F. 963.
162,157 Flour manufacture, R. L. Downton, 1 F. 199; 9 F. 402; 9 F. 766; 108 U. S. 466.
162,183 Paper fastener, G. W. McGill, 48 F. 229.
162,184 Paper fastener, G W. McGill, 45 F. 357.
162 400 Bird cage, J. Maxheimer, 9 F. 460.
162,731 See Reissue 7286.
162,465 Air brake mechanism, Ford. Welsh & Westinghouse, does not anticipate 376837, 59 F 581
162 789 Machine for finishing horseshoe nails, Armstrong & Hutchinson, 26 F. 250.
162 886 Knitting machine, D. Bickford, 2 F. 214.
163,028 Trunk fastener, A. V. Romadka, infringes 128925, 145 U. S. 29
163,398 Machine for turning saw-logs, J. Orm, 30 F. 830.
163,462 Railroad ticket, E. R. Cook, anticipates 268988, 84 F. 646.
163,474 Boot and shoe nailing machine, L. Goddu, 17 F. 516.
163 537 Circus seats, Wm. H. Shuey, F. Cas. 11413.
163,794 See Reissue 8123.
163,825 Apparatus for enameling moldings, W. Wallick, 12 F. 790; 117 U. S. 689.
164,050 Machine for dressing flour, G.T. Smith, 58 F. 382; 64 F.581; 69 F. 94
164,340 Bustle, A. W. Thomas, 35 F. 71.
164,425 Fire alarm signal box, S. Chester, 52 F. 471.
164,858 Wood graining process, G F. Mehling, 19 F. 96.
164 889 Shoe nail, H. F. Whidden, 4 F. 545.
165,110 See Reissue 8106.
165,381 See Reissue 8357.
165,438 Engine house gong, R. Bragg, 58 F. 404. See Reissue 6831.
165,832 See Reissue 8013.
166,353 Veneer cutting machine, C. F. Fairchild, 35 F. 833.
166,395 See Reissue 7808.
166,669 Overshoes, I. F. Williams, 2 F. 683; 41 F. 48; 49 F. 245.
166,681 Consecutive numbering machine, T. S. Bowman, 58 F. 975.
166,700 Molds for ingots, J. Illingworth, 9 F. 154; 19 F. 744.

166,724 Whip socket clasp, E. W. Scott, 49 F. 459.
166,810 Button-hole attachment, W. Randel, 8 F. 591.
166,819 Shutter fastener, J. Shedd, 9 F. 904.
166,907 Saddle trees, A. Teas, 13 F. 406; 106 U. S. 613.
167,040 Harness mountings, C. M. Theberath, 3 F. 143; 3 F. 151; 15 F. 246.
167,123 See Reissue 9296.
167,141 Bottle-stopper, W Vom Hofe, 38 F. 234.
167,400 Packer for oil wells, J. P. Gordon, 51 F. 824; 59 F. 613; 59 F. 614.
167,455 India rubber eraser, R. Lockwood, 6 F. 721; 11 F. 724; 18 F. 37; 18 F 653; 20 F. 164; 25 F. 910.
167,492 Method of uniting knit goods, H. A. Blanchard, 105 F. 970.
167,570 Grain separator, L. C. Royer, 9 F. 696.
167,585 Street cars, J. Stephenson, 14 F. 457; 114 U. S. 149.
167,679 Cotton gin, O. W. Massey, 25 F. 144.
167,814 Torpedo envelope machine, Wolfe & Lilliendahl, 18 F. 176.
167,847 Manufacture of gas, T. S. C. Lowe, 39 F. 268.
168,043 Stock-car, J R. McPherson, 46 F. 782.
168,058 Electric railroad signals, H. W. Spang, 36 F. 194.
168,061 Stock-car, Steventon & McGrath, 46 F. 782.
168,164 Process for producing oil from oleaginous seed, A. B. Lawther, 21 F. 811; 64 F. 221; 124 U. S. 1.
168,252 Wash board, E. S. Heath, 40 F. 763.
168,644 Spindle bolster, W. Jencks, 27 F. 622.
168,663 Lever lifting jack, S. E. Mosher, 31 F. 557; 45 F. 205; 51 F. 441.
169,830 See Reissue 9129.
169,855 Suspender button-strap, A. Shenfield, 21 F. 241; 27 F. 808; 137 U. S. 56.
169,871 Clay-press, J. Watson, 26 F. 536.
169,931 Pianoforte pedals, W. F. Ulman, 14 F. 917; 26 F. 239.
170,239 Type-writer, L. S. Crandall, 50 F. 933.
170,443 Watchman's time detector, W. Imhaeuser, 40 F. 878.
170,462 Boot tree, G. W. Badger, F. Cas. 3305.
170,709 Waste-valve for bath-tub, W. S. Carr, does not infringe Reissue 6739, 46 F. 77; 51 F. 81; 53 F. 819; 55 F. 876.
170,809 Horseshoe, N. J. Blatherwick, 9 F. 202.
170,852 Ventilating louvers, G. Hayes, 21 F. 566.
170,873 Paper perforating machine, P. McAleer, 25 Ct. of Cls. 238.
170,916 Harness saddles, A. Teas, 13 F. 406; 106 U. S. 613.
170,980 Boring machine, G. W. Badger, F. Cas. 3305.
170,997 Baling press, P. K. Dederick, 43 F. 308.
170,998 Baling press, P. K. Dederick, 26 F. 755.
171,133 See Reissue 8014.
171,190 Fire engine harness, E. O. Sullivan, 20 F. 126; 38 F. 240.
171,250 Mail bag, P. S. Thomson, 27 Ct. of Cls. 61.

171,425 See Reissue 8752.
171,568 Wash-board, A. J. Hull, 107 U. S. 636.

1876

171,642 Plow, A. Ball, 8 F. 452.
171,774 See Reissue 10600.
171,866 Paper box, R. Ritter, 41 F. 140; 48 F. 913; 51 F. 229; 55 F. 488; 57 F. 223; 65 F. 1001; 86 F. 917; 95 F. 991; 97 F. 331.
171,882 Busk fastening, R. Stokes, does not anticipate 298303, 148 U. S. 556.
171,926 Water-closet ventilation. Eastman & Cottier, 20 F. 906.
172,064 Air brake, G. Westinghouse, Jr., 59 F. 581; 63 F. 962.
172,092 See Reissue 10252.
172,346 Rawhide fulling machine attachment, H. Royer, 20 F. 853; 38 F. 115; 40 F. 160; 132 U. S. 201.
172,471 Lever lifting jack, S. E. Mosher, 31 F. 557; 45 F. 205; 51 F. 441.
172,527 Lever buckle, H. H. Wales, 59 F. 285; 87 F. 920; 101 F. 126.
172,534 Filling wood, N. Wheeler, 5 F. 63.
172,608 Fruit drying apparatus, J. W. Cassidy, 46 F. 195; 53 F. 257; 64 F. 585; 75 F. 1012.
172,639 Grinding needles, F. W. Mallett, 17 F. 536; 22 F. 829.
172,660 Machine for finishing horseshoe nails, R. Ross, 28 F. 234.
172,756 Draft equalizers, R. M. Marvin, 36 F. 314.
172,896 Hydraulic elevator, T. Stebins, 4 F 445.
172,993 Electric annunciator for elevators, E. Gray, 17 F. 691; 66 F. 163; 83 F. 709.
173,071 Invalid chair, C. B. Sheldon, 43 F :302.
173,124 See Reissue 7729.
173,261 Fire alarm device, R. Bragg, 27 F. 509; 56 F. 292; 64 F.592; 91 F. 265.
173,284 Sole-edge burnishing-machine, C. H. Helms, 28 F. 715; 31 F. 46; 139 U. S. 530.
173,366 Time lock, E. Stockwell, 6 F. 377.
173,369 Car-wheel, S Stutz, 28 F. 83.
173,371 Coach pad. A. Teas, 13 F. 406; 106 U. S. 613.
173,653 Stop valve for hydraulic elevators, J. M. Locke, 35 F. 291; 150 U. S 193
174,465 Telephone, A. G. Bell, 8 F. 509; 15 F. 448; 17 F. 604; 22 F. 309; 25 F. 725; 27 F. 663; 31 F. 729; 32 F. 215; 32 F. 591; 35 F. 735; 36 F. 488; 37 F. 672; 126 U. S. 1; 128 U. S. 315.
174,506 Process for testing lubricating oil, H. B. Everest, 20 F. 848; 22 F 252; 31 F 742.

174,648 Concrete pavement, A. Van Camp, 34 F. 740.
174,684 Cultivator runner, T. W. Kendall, 23 F. 801; 129 U. S. 295.
174,771 Elastic hose, E. Tivey, 35 F. 130.
174,898 Brake shoe, I. H. Congdon, 69 F. 412.
175,020 Gas liquefying pump, J. Boyle, 49 F. 916; 67 F. 937; 80 F. 918; 147 U S. 210.
175,548 Sectional steam boiler, Babcock & Wilcox, 34 F. 339.
175,588 See Reissue 8631.
175,821 Eyeglass holders, I. N. Clawson, 55 F. 976; 61 F. 680.
176,094 See Reissue 7510
176 402 Harvester, W. F. Goodwin, 21 F. 575.
176,636 Treadles, E. L. Howard, F. Cas. 17577.
176 719 Grain drill, J. M. Westcott, 23 F. 348.
176,996 Rolling-mill, Price & Lewis, 46 F. 107.
177,020 See Reissue 9772.
177,194 Manufacture of balls and rosettes of yarn, O. Boehme, 46 F. 190; 50 F. 106.
177 216 See Reissue 8296.
177,237 Horseshoe nail machine, N. W. Goodrich, 32 F 93.
177,253 Collar button, J. Keats, does not anticipate 171882, 148 U. S. 556.
177,296 See Reissue 7558.
177,334 Hydro-carbon stove, A. B. Hutchins, 9 F. 445; 15 F. 919.
177,466 Utilizing leather of old card clothing, F. E. Brummitt, 3 F. 801.
177,576 Leather stuffing and fulling machine, J. A. J. Schutz, whether infringes 77920, 28 F 850.
177,764 Process for obtaining isinglass, I Stanwood, 30 F. 370.
177,851 See Reissue 8127.
177,939 Feather duster, S. M. Hibbard, 9 F. 588.
177,953 See Reissue 7779.
177,986 Metallic covering for buildings, Belt & Perkins, 2 F. 82.
178,261 See Reissue 10625
178,287 Pantaloons, R. Gibbons, 11 F. 896. See Reissue 9616.
178,428 Pantaloons, R. Gibbons, 11 F. 896
178,461 Harrow, J. E. Perkinson, 33 F. 867; 35 F. 744; 54 F. 501.
178,463 Tool for attaching sheet metal moldings, G. M. Peters, 21 F. 319; 129 U. S. 530.
178,598 Machine for making boots and shoes, C W Collyer, does not anticipate 384893, 92 F. 391.
178,735 Pump bucket, J. A Churchill, 30 F. 440; 31 F. 292
178,750 Telegraphic fire alarm, H Ennis, 52 F 459; 61 F. 208.
178 869 Machine for manufacturing counter-stiffeners for boots and shoes, J. R Moffitt, 8 F. 147; 27 F. 511.
178,896 Rubber boots, J. A. Bates, 17 F. 336.
178,916 See Reissue 9957.
178,994 Abrasive paper for finishing shoes, J G. Buzzell, 7 F. 465.

179,016 Cable railway, A. S. Hallidie, 42 F. 679.
179,190 See Reissue 9576.
179,316 Photography, B. T. Irish, F. Cas. 7063.
179,400 Spring seat, Z. Cobb, 36 F. 763.
179,581 Traps for exhaust steam pipes, W. C. Lyman, 19 F. 735. See Reissue 10497.
179,583 Soda fountain, J. Matthews, 21 F. 641.
180,001 Cooking stove, Bussy & McLeod, F. Cas. 1859; 1 F. 640; 105 U. S. 618.
180.287 Lock and latch, H. R. Towne, 36 F. 765.
180,340 Blank for heel-stiffener, J. L. Hatch, 35 F. 139.
180,584 Machine for grinding mouths of glass vessels, T. Hipwell, 28 F. 189.
180,676 Harness saddle tree, A. Teas, 13 F. 406; 106 U. S. 613.
180,717 Railway track brooms, M. C. Isaacs, F. Cas. 7095.
180,718 Sewer excavator, D. Keating, 68 F. 351.
180,832 Electric gas lighting attachment, A. L. Bogart, 59 F. 1003.
180,857 Method of autographic printing, T. A. Edison, 38 F. 744.
180,886 Vehicle running-gear, M. T. Jackson, 17 F. 523.
180,962 Apparatus for making solar salt, T. R. Timby, does not anticipate 321340, 56 F. 144.
181,024 Borated cotton, C. G. Am Ende, 36 F. 593; 152 U. S. 561.
181,113 Hydraulic elevator, T. Stebins, 4 F. 445.
181,309 Machine for priming cartridges, Burton, Salisbury & Wells, 54 F. 703
181 512 Finishing plug tobacco, Worley & McCabe, 104 U. S. 340.
181,664 Grain-bundling machine, T. Fowler, 82 F. 95; 93 F. 828.
181 817 Turn-table, J. Britton, 58 F. 420.
182,633 Compound folding mirror, L. T. Berton, 15 F. 463; 20 F. 788; 33 F. 583.
182,663 Cable railway, A. S. Hallidie, 55 F. 760; 60 F. 410.
182,769 Regulator for hot-air furnaces, G. C. Paine, 56 F. 231; 56 F. 233.
183,055 Air chamber for hydraulic elevator, P. Hinkle, 68 F. 665; 71 F. 876.
183,188 Fountain hose-carriage, I. W. McGaffey, 36 F. 557. See Reissue 10047.
183,423 Manufacture of paper boxes, E. D. Shelton, anticipates 259-416, 81 F. 395.
183,545 Heating stove, Dickey & Perry, 12 F. 436.
183,347 See Reissue 8199.
182,973 See Reissues 7511 and 10087.
183,716 Water closet, W. Smith, 45 F. 202.
183,809 Curtain fixture, A. H. Knapp, 15 F. 115; 20 F. 790.
183,913 See Reissue 7628.
184,207 Cigarette machine, A. H. Hook, 63 F. 835; 69 F. 335; 73 F. 206.

184,281—187,516 **1876** (Concluded)

184,281 Boot and shoe nailing machine, H. Dunham, 17 F. 810.
184,310 Pocket comb cases, C. W. Walker, 24 F 603.
184,352 Apparatus for drying hides, J. N. Duffy, 24 F. 855.
184,281 Machine for nailing shoe soles, H Dunham, 72 F. 60.
184 553 Electric light buoy, Wood, Smith & Spruill, 36 Ct. of Cls. 418.
184,577 See Reissue 8637.
184,759 Printing on metal, J. T. Commoss, 49 F. 920.
184,821 Flour bolter, Bernheisel & Young, does not anticipate 267-098, 56 F. 589.
184,855 Lamp, J. Funk, 3 MacArthur 460.
184,896 Paste board manufacturing machine, E L. Perkins, 2 F.451.
184,933 Apparatus for labeling glass plates, A. Vogeley, 18 F. 827.
184,983 See Reissue 7795.
185,027 Jacquard loom, T. Halton, 34 F. 390.
185,119 See Reissue 8060.
185,193 Wheeled chair, H. S. Smith, 67 F. 801.
185,369 Sash pulley case, J Vetterlein, infringes 126031, 34 F. 336.
185,423 Wind mill, L. B. Anderson, 68 F. 489
185,458 Steam pile-driver, T. M. Skinner. 39 F. 870.
185,501 Tilting chair, M. D. Connolly, 26 F. 243; 68 F. 196.
185,576 Chair seat, R. H Plass, 49 F. 744.
185,716 Hats, J. P. Beatty, 8 F. 610.

1877

185,858 Cartridge weighing machine, J. H. Gill, 25 Ct. of Cls. 415.
185,861 Steam boiler injector, J. T. Hancock, 27 F. 88; 35 F. 61.
185,862 Dating stamp, B B. Hill, 31 F. 282.
186,225 Drill clamp, L. Beland, 20 F. 697.
186,369 Time lock, J. Sargent, 114 U. S. 63.
186,608 Sofa bedstead, W. Ott, 32 F. 89.
186,628 Cigar, J. Schalscha, 19 F. 319.
186,787 Telephone, A. G. Bell, 15 F, 448; 17 F. 604; 22 F. 309; 25 F. 725; 31 F. 729; 32 F. 215; 32 F. 591; 35 F. 735; 36 F. 488; 37 F. 672; 57 F. 661; 57 F. 842; 58 F. 409; 58 F. 410; 126 U. S. 1; 128 U. S. 315.
186,860 Hydrating chlorine gas, W. Maynard, 3 F. 711
186 895 Carpet sweeper, A. W. Stewart, 35 F. 516.
187,100 Cheese former for cider press, J. Clark, 17 F. 79; 119 U. S. 335.
187,279 Machine for making gelatine capsules, F. A. Hubel, 35 F. 414. See Reissues 8440, 10437 and 10807.
187,450 Dash board, B. Burr, 28 F 574; 29 F. 428.
187,452 Wagon body irons. B. Burr, 28 F. 574; 29 F. 428.
187,516 Process for raising cream from milk, W. Cooley, 46 F. 488; 50 F. 279; 50 F. 423; 56 F. 143.

187,620 See Reissue 10054
187,825 Heater and feeder for steam boilers, A. De Beaumont, 81 F. 535; 71 F. 812; 80 F. 995.
187,842 Washboard, D. I. George, 32 F. 667; 40 F. 763.
187,880 Type mold, T. Mason, does not anticipate 352869, 354060 or 354935, 91 F 418.
187,899 Cultivator axles, H. H. Pattee, 23 F. 801; 129 U. S. 295.
187,923 Middlings purifier, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
187,964 Lubricator, W. A. Clark, 25 F. 722.
188,064 Clover-huller, A. Miller, 28 F. 567.
188,079 Sheet metal roofing, H. W. Smith, 51 F. 599.
188,263 Corn-sheller, A. H. Shreffler, 39 F. 798.
188,691 See Reissue 9011.
188,783 Grinding mill, J. S. Detwiler, 55 F. 660; 58 F. 249.
188,879 Ships pump, Eells & Lord, 11 F. 721.
188,950 Trunk fastening, E. Rice, 17 F. 450.
189,115 Sheet-metal shingle, Locher & Knispel, 35 F 658.
189,204 Cable car grip, W. Eppelsheimer, 53 F. 385; 58 F. 226.
189,233 Means for relieving stranded vessels, H F. Knapp, 26 F. 627.
189,250 Sheet metal vessels, C. H Milligan, 21 F. 570.
189,307 See Reissue 9467.
189,405 See Reissue 8114.
189,432 See Reissue 8840.
189,559 Bath tub, C. E. L. Holmes, anticipates 458995, 80 F. 904; 81 F. 868.
189,569 Machine for fitting sidings for whips, M. E. Moore, 71 F. 299.
190,152 Furniture casters, A. C. Martin, 26 F. 272; 133 U.S. 360.
190,184 See Reissue 9097.
190,211 See Reissue 7898.
190,263 See Reissue 8167.
190,368 Automatic fruit-drier, A. Q. Reynolds, 5 F. 450; 120 U. S. 412.
190,655 See Reissue 8536.
190,769 Composition for casting statuary, A. Kiesele, 32 F. 794.
190,816 Cultivator coupling, W. P. Brown, 21 F. 709; 21 F. 714; 51 F. 226; 51 F. 229; 53 F. 578; 61 F. 972; anticipates 242497, 151 U. S. 186.
191,088 Transom lifter, J. F. Wollensak, 28 F. 424; 33 F. 840; 41 F. 53.
191,102 Glass molds for shade-holders, H. Brooke, F. Cas 12470a.
191,103 Molds for glass shades, H. Brooke, F. Cas 12470a.
191,171 Lubricator, C. H. Parshall, 9 F. 293.
191,224 Glass shade manufacture, H. Brooks, F. Cas. 12470a; 3 F. 95.
191,233 Canopy tops, C. E. Fosburgh, 6 F. 493.

191,244 Spring bed bottoms, H. W. Ladd, F. Cas. 7974.
191,264 Grain binder, J. F. Steward, 40 F. 236.
191,400 Whitening and shaving leather, J. G. Buzzell, 25 F. 822.
191,405 Soldering process, Clark & Harris, 21 F. 648.
191,656 See Reissues 8025 and 8026.
191,662 Fire-proof column, Drake & Wight, 35 F. 583.
191,798 See Reissue 9716.
192,008 Button hole attachment for sewing machines, W. Randel, 8 F. 591.
192 014 Railway car window, G. S. Roberts, 44 F. 429; 53 F. 356.
192,057 Ice-creeper, Dewey & Scott, 26 F. 153.
192,098 Plaiting machine, M. Toohey, 4 Hughes 254.
192,225 Barbed-wire fence, A. S. Burnell, 29 F. 863.
192,386 See Reissue 10175.
192,644 Signaling apparatus, L. B. Firman, 44 F. 205.
193,038 Beverage, J. J. Rogers, F. Cas. 12010.
193,476 Sirups and mineral waters, H L. Bowker, F. Cas. 1734.
193,563 See Reissue 8463.
193,567 Spring bed bottom, J. I. Spencer, 29 F. 508.
193,770 Harvester, McCormick, Baker & Erpelding, does not infringe 74342, 129 U. S. 1.
193,840 Faucet, T. A. Andrews, 72 F. 666.
193,867 See Reissue 8460.
193,939 Tension for street car cable, W. Eppelsheimer, does not anticipate 244147, 53 F. 382.
194,059 Ore-washer, S. Stultz, 20 F. 843; 25 F. 147; 54 F. 506.
194,519 Soldering tool, A. Harris, 21 F. 648.
194,539 Middlings-purifier; G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
194,662 Automatically measuring hides of leather, M. V. Etheridge, 15 F. 390.
194,743 See Reissue 9204
195,233 Combined traveling-bag lock and handle, W. Roemer, 19 F. 98; 20 F. 197; 23 F. 447; 26 F. 332; 27 F. 702; 132 U. S. 313.
195,372 Cable railway, A. E. Hovey, 38 F. 841.
195,385 Incased glass vessels, D. W. Norris, 30 F. 525.
195,415 Saddle tree, H. C. & J. R. Still, 9 F. 40.
195,505 Cable railway, A. S. Hallidie, 42 F. 680.
195,515 Centrifugal creaming machine, Lefeldt & Lentsch, 79 F. 357.
195,539 See Reissue 7947.
195,603 See Reissue 9803.
195,948 Fruit drier, W. S. Plummer, 8 F. 150.
196,006 See Reissue 8393.
196,102 Saw mill dog, G. W. Rodebaugh, 37 F. 882.
196,295 Mould for making mortar pipes, E. M. Hamilton, 39 F. 324.

196,425 Illuminating points for electric lights, C. F. Brush, 20 F.826.
196,650 Lubricator, G. H. Flower, 30 F. 190.
196,778 Rubber boot, E. F. Bickford, 18 F. 93.
196,851 Transom lifter, J. F. Wollensak, 28 F. 424; 33 F. 840.
197,137 Horse hay fork, B. Jackson, 73 F. 837.
197,289 Anti-friction journal-box, A. L., G. M. & O. E. Peters, 34 F. 886; 144 U. S. 239.
197,314 Process for preserving meat during transportation, J. J. Bate, 9 F. 387; 11 F. 902; 13 F. 553; 20 F. 192; 24 F. 696; 30 F. 683; 30 F. 685; 31 F. 809; 56 F. 713; 129 U. S. 151; 157 U. S. 1.
197,339 Signal cartridge, H. H. Coston, 33 Ct. of Cls. 438.
197,369 Tripod head for surveying, D. Hoffman, 2 F. 74.
197,528 Button hole machine feed mechanism, F. E. Schmidt, 12 F. 563.
197,545 See Reissue 8765.
197,607 Boot lasting machine, Copeland, Woodward & Brock, 58 F. 353; 61 F. 102.
197,689 Carriage spring, H. Timken, 37 F. 205; 155 U. S. 141.
197,716 Strap for securing hose to coupling, J. A. Caldwell, 39 F. 365.
197,717 Implement for applying straps to hose couplings, J.A.Caldwell, 39 F. 365.
197,807 See Reissue 8169.
197,913 Corset, I. D. Warner, 7 F. 468.
198,410 Hay tedder, J. Mudgett, 55 F. 645.
198,432 Ore washer, S. Stutz, 20 F. 843; 25 F. 147.
198,467 Beverage, J. J. Rogers, F. Cas. 12010: 3 F. 639.
198,610 See Reissue 9408.

1878

198,968 Letter-file, W. C. Bussey, 36 F. 590.
199,038 Heater and feeder for steam boilers, A. De Beaumont, 81 F. 535.
199,052 Portable hay and cotton press, A. A. Gehrt, 26 F. 763.
199,082 Riding attachment for plow, J. McBride, 72 F. 908; 97 F. 217.
199,244 See Reissue 8868.
199,582 Trap for water closets, J. Sargent, 41 F. 348.
199,621 Fountain pen, A. T. Cross, 9 F. 607; 11 F. 601.
199,806 Slop safe for water closet, J. Demarest, 31 F. 47.
199,887 Fire proof column, P. B Wight, 35 F. 583.
199,908 Manufacture of celluloid sheets, J. W. Hyatt, 31 F. 904; 34 F. 324; 44 F. 81; 52 F. 740.
199,948 Connecting blind-slats, J. G. Wilson, F. Cas. 17579a.
200,068 See Reissue 8195.

247

200,078 Unhairing and scouring hides, J W McDonald. 24 F. 600.
200,119 Safety-valve, H. G. Ashton, 50 F. 100; 52 F. 314.
200,133 Marking plug tobacco, J. T. Drummond, 26 F. 243.
200,214 Carriage axles, W. E. Miller, 11 F. 510.
200,358 Base ball mask, F. W. Thayer, 27 F. 66.
200,394 Furnace for heating links, J. H. Helm, 35 F. 421.
200,682 Leather-skiving machine, C. Amazeen, 39 F. 612.
200,939 Fabric for collars and cuffs, Sanborn, Kanouse & Sanborn, 23 F. 397; 24 F. 275; 24 F. 585; 25 F. 482; 30 F. 437; 35 F. 418.
201,296 Magneto electric machine for firing fuses, H. J. Smith, 64 F. 797; 67 F. 137.
201,536 Bronze alloy, E. C. Kirk, 19 F. 417.
201,646 Ore-crusher, C. M. Brown, 42 F. 49; 78 F. 350; 153 U. S. 332.
201,670 Sulky plow, H. L. Hewitt, 11 F. 422.
201,946 Spring tooth harrow, D. C. Reed, 40 F. 882; 67 F. 130; 74 F. 236.
202,158 See Reissue 9901.
202,412 Collar button, S. Cottle, 31 F. 42
202,528 Apparatus for making sheet-metal chains, F. Egge, 46 F. 393.
202,660 Hydraulic power accumulator, T. M. McGuire, F. Cas. 8814; 8 F. 761.
202,673 Necktie shields, Smith & Thayer, 20 F. 693; 20 F. 696.
202,695 See Reissue 9586.
202,735 Sleeve supporter, J. P. Lindsay, 10 F. 907.
203,069 Lawn sprinkler, Pennington & Beggs, 7 F. 462.
203,108 Billiard table, J. E. Boyle, 47 F. 218.
203,226 Grain car doors, C. R. Watson, 23 F. 443; 132 U. S. 161.
203,249 Rope tramway and apparatus, T. H. Day, 53 F. 545.
203,316 Bung for cask, G. Borst, 20 F. 314; 31 F. 76.
203,411 See Reissue 8718.
203 604 Banjo, C. E. Dobson, 149 U. S. 117.
203,860 Trunk fastener, C. A. Taylor, 49 F. 855; 60 F. 753; 63 F. 1001; 67 F. 163.
204,068 Manufacture of boots, Miller & Creighton, 26 F. 759.
204,216 Refrigerator, R. T. Hambrook, 152 U. S. 100.
204,321 Wardrobe bedstead, Hand & Caulier, 26 F. 100; 35 F. 592.
204,619 See Reissue 9818.
204,701 Mangle, J. F. Baldwin, 67 F. 336.
204,741 Book-binder's dry press and sheet tie, J. W. Jones, 16 App. D C. 23; 184 U. S. 598.
204,766 See Reissue 9365.
204,882 Catch-basin cover, G. G. Campbell, 45 F 564; 63 F. 463.
205,024 Dress shield, G. W. Wood, 32 F. 226.
205 068 Extension chandelier, J. A Evarts, 35 F. 748.
205,129 Shoes and gaiters, F. Packard, 15 F. 112.

205,193 Breech-loading fire-arm, D. M. Lefever, 13 F. 86.
205,244 Pile-driver, G. H. Cavanagh, 42 F. 909.
205,572 See Reissue 10284.
205,589 See Reissue 9260.
205,718 See Reissue 10288.
205,744 Furnace tuyere, J M. Hartman, 70 F. 102.
205,816 Corn-cob smoking pipe, H. Tibbe, 37 F. 686; 43 F. 75; 51 F 763; 62 F. 158.
205,927 Railroad track drill, F. Underwood, 21 F. 573; 24 F. 183.
205,942 Method and apparatus for extinguishing fires, W.A.Graham, 16 F. 543; 21 F. 40; 59 F. 897.
206,061 Lamp, C. S. Westland, 10 F. 291.
206,074 Heating stove, P. D Beckwith, 150 U. S. 164.
206,077 Fertilizing compound, Boykin & Carmer, 9 F. 699.
206,112 Composition for pavements, T. Hyatt, 69 F. 148.
206,141 See Reissue 8866.
206,396 Paper-pulp barrel head, G. W. Laraway, 28 F. 141.
206,514 Sand washer, D. C. Williams, 23 F. 39.
206,565 Fare register, C. B. Harris, 33 F. 31.
206,781 Machine for cutting printer's leads, W. H. Golding, 70 F. 1008.
206,835 Cigar-lighter, G Selden, 9 F. 390.
206,930 Baking powder, W. P. Clotworthy, 27 F. 69.
207,058 Sheet metal can, Miller & Coll, 56 F. 154.
207,283 Mash rake, C. Kaestner, 54 F. 715.
207,343 Brick machine, C. Chambers, Jr., 92 F. 630.
207,484 Steam traps, J. H. Blessing, 20 F. 633.
207,485 Pump regulating valve, J. H Blessing, 73 F. 825; 79 F. 966.
207,738 Box creamery, Hill & Prentice, 22 F. 830.
207,791 Harness terret, M. E. Zeller, 63 F. 991; 66 F. 995.
207,822 Milk can, P. Shaw, 21 F. 321.
208,137 Grain binder, J. F. Appleby, 61 F. 256.
208,157 Rope clamp, J. C. Covert, 25 F. 43; 70 F. 788; 96 F. 568.
208,258 Handle socket for shovels, H. M. Myers, 141 U. S. 674.
208,376 Heating apparatus, T. Connelly, 39 F. 785.
208,541 Lock for satchel, W. Roemer, 19 F. 205; 132 U. S. 103.
208 595 See Reissue 8962.
208,628 Incased glass vessel, D. W. Norris, 30 F. 525.
208,838 Sewing machine, Miller & Diehl, 34 F. 393.
208,903 Cartridge gaging machine, J. H. Gill, 25 Ct. of Cls. 415.
208 936 Middlings-purifier, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
208,956 Pneumatic photographic shutter, J. W. T. Cadett, 64 F. 381.
209,070 Paint can, E. Norton, 22 F. 787.
209,266 Telephone transmitter, J. H. Irwin, 9 F. 517.
209,365 Cake cutting machine, J. F. S. Smith, 30 F. 618.

1878 (Concluded)

209,393 Waxing paper, S. Hammerschlag, 7 F. 584; 9 F. 43; 10 F. 479; 18 F. 175.
209,428 Pipe-moulding machine, F. Schickle, 29 F. 866.
209,701 Buckle, G. W. McGill, 7 F. 671.
209,826 Machine for forming boot and shoe heel stiffeners, J. R. Moffit, 17 F. 336; 27 F. 511.
209,939 Exhaust steam muffler, W. H. Swift, 75 F. 589.
209,960 Rowlock outrigger, M F. Davis, 45 F. 693; 71 F. 961.
209,963 Soft-dough machine, H. Ducsh, 30 F. 619.
210,458 Horse hay fork, B. Jackson, 73 F. 837.
210,559 Regulator for incubators, E. S. Renwick, 65 F. 517.
210,666 Stocking supporter, F. B. Brown, 62 F. 463.
210,714 Paper board manufacture, J. F. Sheeder, 25 F. 824.
210,780. Celluloid covering for piano keys, J. W. Hyatt, 21 F. 313; 23 F. 38; 26 F. 451; 27 F. 358.
210,797 Machine for unhairing and scouring hides, J. W. McDonald, 24 F. 600; 55 F. 323; 63 F. 611.
210,946 Lifting jack, J. O. Joyce, does not infringe 168663 and 172-471, 31 F. 557.
211,052 Dumping wagon, L. Rodenhausen, 51 F. 220.

1879

211,262 Process of making incandescent lamp filaments, Sawyer & Man, anticipates 306980, 51 F. 24; 58 F. 692.
211,582 See Reissue 10806.
211,848 Paper-folding machine, R M. Hoe, 27 F. 204.
211,854 Car axle box lid, J. Knizer, 81 F. 407.
212,313 Metallic cartridge, W W. Hubbell, 179 U. S. 77.
212,316 Paper fastener, G. W. McGill, does not anticipate 293234, 58 F. 220.
212,420 Grain binder, J. F. Appleby, 61 F. 256.
212,487 Sash fastener, J. B. Morris, 20 F. 121; 27 F. 748.
212,526 Gang saw mill, H. D. & E. N. Wickes, 65 F. 610; 75 F. 118.
212,634 See Reissue 9800.
213,119 Folding gate, Maddox & Humphries, 56 F. 840; 61 F. 684.
213,273 Grinding mill, J. W. & S. J. Woodcock, 46 F. 629.
213,323 Machine for stretching raw hide, W. Coupe, 16 F. 673; 37 F. 16; 147 U. S. 322.
213,447 Cask scrubbing machine, C. Pohl, 39 F. 782; 58 F. 568; 134 U. S. 381.
213,529 Vehicle dash, G. M. Peters, 129 U. S. 541.
213,583 Bottle-washing machine, Miles & Lovett, 26 F. 329.
213,642 Ball toy, W. C. Farnum, 106 F. 735.
213,992 See Reissue 8755.
214,292 Machine for crimping heads on tin cans, W. J. Gordon, 64 F. 599.

214,513 Sewing machine, L. B. Miller, 8 F. 920.
214,589 Steam engine lubricator, N. Seibert, 48 F. 169.
214,643 Glass scale-pans, C. Forschner, 26 F. 858.
214,684 Manufacture of boots and shoes, W. R. Miller, 26 F. 759.
214,706 Barbed wire machine, N. G. & T. D. Ross, 16 F. 669.
215,024 See Reissue 9419.
215,034 Coating articles with vulcanizable rubber, I. Adams, Jr., 21 F. 67.
215,070 Chicken brooder, E. S. Renwick, 65 F. 519.
215,178 Bung fastener and cover, F. A. Stegner, 36 F. 184.
215,313 Process of cooking peas, H. H. Beach, 68 F. 911.
215,548 See Reissue 8914.
215,679 Process for making beer, Meller & Hoffman, 10 F. 289; 20 F. 725; 21 F 580; 39 F. 277; 122 U. S. 413.
215,837 Telephone switch, H. L. Roosevelt, 79 F. 959; 92 F. 181.
216,025 Seeder, B. Delong, 22 O. G. 2242.
216,108 Process of manufacturing flexible paper, T. S. Scott, 69 F. 247; 72 F. 508.
216,164 Cigarette machine, C. G. & W. H Emery, 63 F. 835; 69 F. 335; 70 F. 383; 73 F. 206; 73 F. 834.
216,231 Velocipede saddle, J. Shire, 34 F. 893; 64 F. 369; 144 U. S. 248.
216,256 Harness box loop, Brightman & Burrell, 18 F. 378.
216 276 Carriage axles, E. D. Ives, 11 F. 510
216,293 Tobacco resweating apparatus, A. Robinson, 8 F. 128; 11 F. 798; 119 U S. 530.
216,305 Machine for making balls of leather scraps, S. Brown, 57 F. 623.
216.344 Shingle machine, B. F. Penney, 22 F. 840.
216,506 Oil-car, M. C Brown, 42 F. 295; 48 F. 109; 54 F. 521.
216,510 Interlocking switches and signals, A. G. Cummings, 58 F. 385.
216,615 Axle skein for vehicles, N. L. Holmes, 27 F. 73.
216,767 Sash cord guide, Sloan & Clarkson, 43 F. 796.
216,787 Reversing pulleys, G. C. Gill, 42 F. 837.
216,821 Fire-extinguishing apparatus, C Barnes, 32 F. 159.
216.973 Metallic button, C. Radcliff, 34 F. 322.
217,243 Waste pipe trap, Scarborough & Bates, 75 F. 579.
217,280 Machinery for waxing paper, S Hammerschlag, 32 F. 586.
217,519 Lemon squeezer, J. Fanning, 2 F. 568; 4 F. 148; 9 F. 106.
217 542 See Reissue 10093.
217,677 Dynamo, C. F. Brush, anticipates 264668, 88 F. 267.
217,907 Letter file, J. S. Shannon, 36 F. 590; 65 F. 599; 77 F. 465.
217,909 Paper holder, Smith & Shannon, 9 F. 205; 36 F. 585; 67 F. 928; 73 F. 684.
217,964 Hammock, J. P. Travers, 23 F. 511.

218,032 Lace purling, A. G. & W. P. Jennings, 10 F. 669; 24 F. 697; 29 F. 861.
218,110 Railway switch stand, J. Brahn, 35 F. 64.
218,220 Sweat leather for hats, J. Bigelow, 1 F. 856; 32 F. 401; 40 F. 154.
218,227 Device for inserting and clinching metallic staples, W. J. Brown, does not infringe Reissue 9803, 123 U. S. 589.
218,251 Wisp broom, J. H. Flynn, 62 F. 284.
218,300 Hair crimper, Mills & Hershey, 33 F. 922; 40 F. 584; 150 U. S. 627.
218,427 Dredging machine shovel, J. Canan, 23 F. 185.
218,460 Knitting machine, B. F. Shaw, 48 F. 234.
218,564 Automatic fire extinguisher, H. S. Parmelee, 24 F. 735.
218,758 Bird cage, J. Maxheimer, 9 F. 460.
218,875 Water supply system, N. W. Green, 55 F. 516.
219,057 Relief valve for beer cask, E. Zesch, does not anticipate 222-975, 46 F. 288.
219,090 See Reissue 9439.
219,208 Arc lamp, C. F. Brush, 40 F. 826; 43 F. 534; 44 F. 284; does not infringe 147827, 44 F. 419; 45 F. 241; 45 F. 893; 46 F. 79; 48 F. 224; 52 F. 945; 52 F. 965; 69 F. 240; 76 F. 761.
219,455 Lubricant, S. Frazer, 22 F. 106.
219,462 Hat, R. Gray, 9 F. 400.
219,464 Visiting cards, P. Hake, 37 F. 783; 44 F. 283.
219,656 Feed mechanism for button-hole machine, F. E. Schmidt, 12 F. 563.
219,910 Milk pan, J. G. Cherry, 50 F. 279.
220,002 Spoons and forks, R. Wallace, 13 F. 172.
220,003 Making spoons and forks, R. Wallace, 13 F. 172.
220,088 Non-interfering fire alarm box, A. H. Palmer, 69 F. 147.
220,126 Braid pin, A. Cook, 2 F. 782; 3 F. 161.
220,453 Side-hill plow, Wiard & Bullock, 52 F. 870.
220,472 Cartridge anvil, J. H. Gill, 25 Ct. of Cls. 415.
220,514 Wind mill, Woodmanse & Lebkicker, 68 F. 489.
220,610 Neck-wear pins, Hart & Gaither, 20 F. 693; 20 F. 696; 24 F. 558.
220,767 Soft metal trap, J. McCloskey, 8 F. 710; 9 F, 38; 15 F. 750.
220,889 Machine for pouncing hats, E. B. Taylor, 29 F. 147; 36 F. 317; 148 U. S. 482.
220,906 Leather skiving machine, C. Amazeen, 39 F. 612
220,920 Heel trimming machine, Henderson & Paine, 70 F. 54; 77 F. 462.
220,932 Paper stapling machine, G. W. McGill, does not anticipate 293234, 58 F. 220.
220,933 Paper stapling device, G. W. McGill, does not anticipate 293-234, 58 F. 220.

220,986 Currycomb, P. Plant, 77 F. 844.
221,031 Watering trough, J. S. Campbell, 66 F. 327, 69 F. 1002.
221,056 Fruit-drier, G. S. Grier, does not infringe 190368, 120 U. S. 412.
221,062 Folding chairs, L. S. Hayes, 8 F. 912.
221,203 Basket cover fastening, W. I. Winne, 40 F. 463.
221,206 Oil-stove, J. M. Adams, 26 F. 270.
221,310 See Reissue 10062.
221,482 Whip-socket, J M. Underwood, 19 F. 815.
221,488 Store service apparatus, J. C White, 30 F. 824.
221,754 Hammock, V. P. Travers, 35 F. 133; 39 F. 605.
222,234 Electric heat and vapor governor for spinning and weaving rooms, J. M. Bradford, 36 F. 191.
222,264 Scarfs, T. J. Flagg, MacA. and MacK. 355.
222,379 See Reissue 9393.
222,420 See Reissue 10189.
222,524 See Reissue 10938.
222,767 Wheeled cultivator, E. A. Wright, 41 F. 351; 151 U. S. 186.
222,803 Air brake, G. Westinghouse, Jr. 59 F. 581; 63 F. 962.
222,814 See Reissue 9811.
222,856 Removable oil chamber for street lamp, H. S. Belden, 39 F. 699; 41 F. 43; 41 F. 47; 48 F. 682.
222,895 Roller grinding mill, W. D. Gray, 39 F. 26; 40 F. 305; 43 F. 528; 44 F. 217; 156 U. S. 261.
222,899 Carbine holder, H. Hartman, 35 Ct. of Cls. 106.
222,975 Relief valve for beer vessels, Zwietusch & Heitman, 29 F. 449; 46 F. 288; 60 F. 93.

1880

223,311 Celluloid comb manufacture, W. Booth, 25 F. 319.
223,338 Washboard frame, J. M. Gorham, 38 F. 585; 129 U. S. 19.
223,659 Automatic brush adjuster for dynamos, Thomson & Houston, anticipates 238315, 65 F. 615; 70 F. 69; 72 F. 530.
223,812 Harvester, W. F. Olin, 40 F. 236; 155 U. S. 286.
223,847 Food product from corn, J. F. Gent, 77 F. 970; 101 F. 272.
223,898 Incandescent electric lamp, T. A. Edison, 44 F. 295; 47 F. 454; 52 F. 300; 53 F. 592; 54 F. 504; 54 F. 678; 56 F. 496; 57 F. 616; 57 F. 642; 58 F. 572; 58 F. 878; 59 F. 358; 59 F. 691; 60 F. 276; 60 F. 397; 61 F. 834; 62 F. 397; 64 F. 225; 64 F. 229; 64 F. 491; 65 F. 212; 65 F. 551.
223,969 Electrical switch pin, J. H. C. Watts, 77 F. 895.
224,076 Corset, M. Cohn, 26 F. 147; 27 F. 289.
224,123 Potato digger, L. A. Aspinwall, 32 F. 703.
224,219 Cutting attachment for sewing machines, J. H. Osborne, 105 F. 970.

224,273 Spring tooth harrow, S. C. Cobb, 84 F. 671.
224,281 Baling press, P. K. Dederick, 26 F. 755.
224,284 Cable railway, W. Eppelsheimer, 42 F. 412.
224,529 Copying book, S. Hano, 84 F. 344.
224,665 Wax stencil sheet, T. A. Edison, 68 F. 487.
224,685 Sectional boiler, Hazelton & Kennedy, 50 F. 196; 56 F. 845.
224,710 Band wheel bearings for sewing machine, Miller & Diehl, whether infringes 128460, 54 F. 380; 68 F. 191; 70 F. 985; 77 F. 841.
224,760 Machine for sawing stones, H. Young, 37 F. 203; 43 F. 387.
224,792 See Reissue 9891.
224,923 Combined child's chair and carriage, J. W. Kenna, 32 F. 830; 45 F. 258; 146 U S. 476.
224,974 Machine for making stove-pipe elbows, W. A. Wheeler, 26 F. 918.
224,991 Rectal speculum, A. W. Brinkerhoff, 37 F. 92; 146 U. S. 515.
225,071 Electric gas lighter, H. F. Packard, 42 F. 293; 70 F. 790.
225,108 Coloring matter from alphanapthol, H. Cars, 22 F. 530.
225,261 Plastic material, O. F. Woodward, 52 F. 385.
225,388 Telephone transmitter, J. H. Irwin, 9 F. 517.
225,476 Bottle stopper, C. G. Hutchinson, 12 F. 131.
225,492 Saucepan, M. G. W. & W. D. Scott, 11 F. 726.
225,533 Dam, A. Pasqueau, 26 Ct. of Cls. 509.
226,052 See Reissue 9414.
226,353 Transom lifter, F. A. Reiher, infringes 191088 and 196851, 28 F. 424; infringes 191088, 41 F. 53.
226,402 Device for filing and binding papers, I. W. Heysinger, 52 F. 816; 61 F. 405.
226,668 Tea kettle, N. A. Menaar, 40 F. 675.
226,845 Machine for enameling or preparing moulding for gilding, W. Glasgow, 22 F. 391
226,890 Malt kiln, W. Toepfer, 31 F. 913; 67 F. 134; 83 F. 712.
227,061 Flanging machine, Russell & McDonald, 23 F. 249.
227,102 Electric railway signalling apparatus, Gassett & Fisher, 68 F. 913; 68 F. 914; 69 F. 833; 87 F. 906; 96 F. 761.
227,129 Spinning spindle support, F. J. Rabbeth, does not anticipate 253572, 57 F. 653.
227,229 Incandescent electric lamp, T. A. Edison, 52 F. 300.
227,350 See Reissue 10083.
227,416 Stylographic pen, A. T. Cross, 9 F. 607.
227,818 Ore roasting furnace, W. C. Munroe, does not anticipate 471-264, 115 F. 150.
227,839 Shoe sole polisher, J. W. Rogers, does not anticipate 317622, 79 F. 329; 96 F. 997.
227,936 Gang-edger, J. A. Robb, 41 F. 143; 51 F. 446; 60 F. 408.

228,107 Elevator governor, C. R. Otis, 68 F. 665; 71 F. 876.
228,136 Machine for making buckle levers, L. A. Sprague, 12 F.721; 123 U. S. 249.
228.186 Cotton belting, M. Gandy, 28 F. 570; 143 U. S. 587.
228.233 Button machine, W. W. Wade, 16 F. 130; 129 U. S. 202.
228,241 Car-door bolt, A. W. Zimmerman, 39 F. 420.
228.344 Ice machine, C. P. G. Linde, infringes 148675, 31 F. 469.
228,347 Angle splice for railway joint, J. D Hawks, 69 F. 468.
228,525 Roller mill, W. D. Gray, 43 F. 576; not infringed by 334460, 138 U. S. 124.
228,744 Noise muffler, E. D. Eames, infringes 209939, 75 F. 589.
228,779 Mechanical movement, W. J. Perkins, 40 F. 672.
228,879 Pool ball frame, S. De Gaetano, 76 F. 978; 79 F. 85.
228,928 Tobacco sweat house, C. S. Phillips, 31 F. 39.
228,939 Die for ornamenting paper, L. H. Rogers, 43 F. 591.
229,127 Razor, J. Heitner, 34 F. 793.
229,280 Waffle irons, Selden & Griswold, 55 F. 991; 62 F. 389; 65 F. 513; 68 F. 494.
229,283 Try square, L. S. Starrett, 14 F. 910.
229,326 Water closet bowl, T. Maddock, 45 F. 578.
229,458 See Reissue 9690.
229.629 Sewing machine, Miller & Diehl, 34 F. 393.
229,783 Store service apparatus, J. C. White, 30 F. 824.
229,998 Feed for printing press, F. L. Goss, 14 F. 576.
230,105 Bedstead, S. S. Burr, 20 F. 123.
230,409 Breech-loading fire-arm, C. H. Entebrouck, 82 F. 206; 91 F. 160.
230,590 Electric gas lighter, J. P. Terrell, 29 F. 515; 41 F. 390; 48 F. 375; 51 F. 755.
230,604 Machine for making wire chains for check-row corn-planters, A. Barnes, 64 F. 587; 75 F. 662.
230,745 Ornamental chain, H. A. Church, 28 F. 101.
230,778 See Reissue 9942.
230,823 Magazine breech-loading gun, A. H. Russell, 97 F. 634; 35 Ct. of Cls. 154; 182 U. S. 516.
230,850 Oil-stove, J. M. Adams, 26 F. 270.
230,943 Steam engine, W. J. Innis, 41 F. 788.
231,016 Oar, M. F. Davis, 45 F. 693.
231,017 Foot-board for boats, M. F. Davis, 45 F. 693; 71 F. 961.
231,021 Hod elevator, E. B. Demarest, 12 F. 494.
231,104 See Reissue 10155.
231.147 Plow beam, C. P. Buckingham, 51 F. 236.
231,199 Machine for making buckle levers, L. A. Sprague, 12 F.721; 123 U. S. 249.
231,207 Fare register, J. B. Benton, see 233915.
231,510 Whip-sockets, J. M. Underwood, 12 F. 140; 12 F. 625.
231,779 Cigarette machine, C. G. & W. H. Emery, 70 F. 383.

231,810 Plow point, J. L. Judd, 35 F. 502.
231,919 Flying target, G. Ligowsky, 35 F. 755. See Reissue 10-122.
232,207 Breaking cart, D. C. Putnam, 67 F. 542; 80 F. 109; 87 F. 470; 87 F. 742.
233,240 Adjustable dress form; J. Hall, 54 F. 701.
232,304 Electric gas lighter, F. V Sanford, 42 F. 293.
232,371 Fruit paring machine, R. P Scott, 55 F. 971.
232,400 Hay baling press, A. A. Gehrt, 42 F. 842; 50 F. 96; 51 F. 233.
232,435 Ballasting vessels, J. H. Barnes, 9 F. 465.
232,468 Bottle stopper, J. C. De LaVergne, 66 F. 765.
232,545 Fountain pen, J. S. Purdy, 30 F. 188.
232,561 Lacing hook stock, S. N. Smith, 16 F. 414; 28 F. 854.
232,661 Electric gas lighter, J. P. Tirrell, 55 F. 64; 59 F. 1003.
232,792 Coal mining machine, G. D. Whitcomb, 47 F. 652.
232,907 Cartridge assembling machine, G. P. Salisbury, 54 F. 703; 58 F. 309.
232,975 Cutting pliers, M. C. Johnson, 25 F. 906; 29 F. 323; 130 U. S. 117.
233,035 Mowing machine, E. Smith, 20 F. 795; 40 F. 87; 92 F. 167.
233,116 Barbed wire cable, N. G. & T. D. Ross, 16 F. 669.
233,142 Ordnance lock, J. B. Davis, 23 Ct. of Cls. 329.
233,228 Water tube boiler, A. H. Fowler, 75 F. 289.
233,239 Dress form, J. Hall, 48 F. 113; 55 F. 79.
233,240 Adjustable dress form, J. Hall, 34 F. 37; 35 F. 219; 37 F. 351; 37 F. 352; 39 F. 468; 39 F. 608; 150 U. S. 221.
233,371 Carpet sweeper, A. D. Plumb, 72 F. 67.
233,393 Automatic fire extinguisher, C. Barnes, 32 F. 159; 51 F. 88; 60 F. 605.
233,409 Saw dog, W. Gowen, 13 F. 879.
233,425 Flambean, J. A. McCall, 43 F. 300.
233,497 Lubricant, S. Frazer, 22 F. 106.
233,511 India rubber eraser, F. H. Holton, 18 F. 37; 18 F. 653; 20 F. 164.
233,574 Insect protector, J. J. & K. M. Strong, 17 O. G. 446.
233,746 Electric railway signaling apparatus, O. Gassett, 68 F. 913; 68 F. 914; 69 F. 833; 87 F. 906; 96 F. 761.
233,915 Fare register, J. B. Benton, see 231207, 23 F. 593; 24 F. 793.
233,932 Carriage axles, E. D. Ives, 11 F. 510.
233,969 Telephone transmitter, E. Berliner, invalidates 463569, 65 F. 86; 109 F. 976.
234,002 Lock and key, C. C. Dickerman, 36 F. 765.
234,191 Machine for making stove-pipe elbows, J. P. Ioor, infringes 224974, 26 F. 918.
234,213 Lock cylinders, W. H. Taylor, 36 F. 765.

234,286 Mitt shaping machine, process and article, W. P. Jennings, 31 F. 84.
234,413 Galvanic battery, G. L. Lachauche, 33 F. 506.
234,549 Baling press, W. L Duke, 19 F. 647.
234,689 See Reissue 10021.
234,916 Mechanical lamp-shell, R Hitchcock, 45 F 362.
235,401 Potato planter, L. A. Aspinwall, 32 F. 697.
235,551 Pedals for velocipedes, T. W. Moran, 34 F. 886.
235,600 Gasoline stove, C & J. Whittingham, 63 F. 698; 63 F. 1000.
235,754 House draining apparatus, C. W. Durham, 36 F. 596.
235,924 Locomotive head-light, I. A. Williams, 47 F. 322.
236,052 Steam engine valve gear, E. A. Marsh, 15 F. 914; 128 U. S. 605.
236,101 Middlings-purifier, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.

1881

236,149 Safety-pin, H. C. Field, 45 F. 480.
236 350 Button sewing machine. J. H. Morley, 23 F. 344; 41 F. 52; 62 F. 291; 64 F. 368; 129 U. S 263.
236,425 Cooking stove, G. F. Filley, 25 F. 282; 30 F. 434.
236,723 Sleeve nut, G. H. Sellers, 35 F. 131.
236,766 Machine for winding yarn, J Boyd, 40 F. 152.
236,887 Dress form, J. Hall, 32 F. 282.
236,905 Water closet bowl, C. H. Moore, 65 F. 526
237,092 Pyrotechnic signal, W. F. Coston, 47 F. 66.
237,320 Break-pin for grinding mills, G. & A. Raymond, 42 F. 49; 78 F. 350; 153 U. S. 332.
237,454 Fountain pen, W. W. Stewart, 30 F. 188.
237,605 Machine for making paper cartridges, G. P. Salisbury, 54 F. 703.
237,740 Cultivator, Gardiner & Downey, 53 F. 120.
237,771 Drive chain, H. E. Paine, 91 F. 262.
238,100 Corset, S. Florsheim, 26 F. 256; 137 U. S 64.
238,101 Elastic gore or gusset, S. Florsheim, 26 F. 256; 137 U.S. 64.
238,201 Buffing pad, A. Andren, does not anticipate 317622, 79 F. 329.
238,303 Shoe sole trimmer, W. D. Orcutt, 28 F. 575; 137 U. S. 423.
238,315 Current regulator for dynamo, Thomson & Houston, 35 F. 904; 46 F. 75; 65 F. 615; 70 F. 69; 72 F. 530.
238 387 Typewriter, T. Hall, 56 F. 849.
238 446 Process of and machinery for making harness cruppers, J. Shaffer, 55 F 649.
238,640 Cigarette machine, J. A. Bonsack, 63 F. 835; 69 F. 335; 70 F. 383; 73 F. 206.

238,677 Roller mill, W. D. Gray, 43 F. 528; 156 U. S. 261.
238,702 Belt pulley, P. Medart, 158 U. S. 68.
238,703 Metallic spring bed P. H. Mellon, 23 F. 153.
238,720 Printing press, W. Scott, 112 U. S. 50.
238,940 Method of permanently fixing artificial teeth to the mouth, J. E. Low, 22 F. 659; 44 F. 350; 72 F. 169; 77 F. 313; 96 F. 442; 111 F. 916; 122 F. 74; 130 F. 1022.
239,011 Shuttle for weaving wire cloth, G. F. Wright, 65 F. 425; 67 F. 790.
239,012 Art of weaving wire cloth, G. F. Wright, 65 F. 425; 67 F. 790.
239,089 Sulphate of alumina manufacture, J H. Eastwick, 14 F. 40.
239,659 Centrifugal cream separator, Houston & Thomson, 77 F. 879; 79 F. 357; 84 F. 881.
239,702 Car axle box, S A. Bemis. 75 F. 403; 80 F. 287; 98 F. 121.
239,850 Road wagon, C. W. Saladee, 37 F. 205; 155 U. S. 141.
239,927 Binding books, H. Brehmer, 11 F. 155.
240,008 Burr for knitting machines, S. Conde, does not anticipate 424314, 115 F. 527.
240,146 Sink, J. Kilbourne. 47 F. 57; 50 F. 697.
240,266 Process of curing and coloring tobacco, C. S. Phillips, 31 F. 39.
240,546 Button hole sewing machine, J. Reece, 54 F. 884; 61 F. 958.
240,569 Undershirt, R. M. Appleton, 64 F. 769.
240,586 See Reissue 10272.
240,607 Windmill, W. D. Nichols, 105 F. 781.
240,630 Fishing apparatus, H. E Willard, 28 F. 750.
240,905 Bicycle, J. Harrington, 34 F. 887.
241,008 Store-service apparatus, H. H. Hayden, 29 F. 210; 30 F. 824.
241,044 Cable tramway for curves, S. R. Mathewson, 43 F. 73.
241,246 Electric railway signalling apparatus, W. R. Sykes, 43 F. 331; 59 F. 20; 61 F. 940.
241,321 Woven wire bed bottom, Dunks & Ryan, 35 F. 831; 145 U. S. 241.
241,471 Manufacture of cutlery, J. Beecher, 40 F. 471; 50 F. 538.
241,573 Pump, B. C. Vanduzen, 82 F. 432.
241,750 Machine for burnishing knife blades, L. G. Taber, 106 F. 83.
241,828 See Reissue 10361.
241,916 Spring bed bottom, L. C Boyington, 24 F. 785.
241,962 Cartridge heading machine, J. H. Gill, 25 Ct. of Cls. 415.
242,141 Axle lubricator, Laskey & Arnold, 38 F. 427.
242,177 See Reissue 10106.
242,382 Tips for insoles, Shuter & Davis, 16 F. 564; 78 F. 926,
242,497 Wheeled cultivator, E. A. Wright, 35 F. 295; 35 F. 299; 36 F 905; 41 F. 351; 57 F. 980; 151 U. S. 186.

242,661 Paper bag machine, Leinback, Wolle & Brunner, 75 F. 395.
242,944 Satchel latch, J. W. Lieb, 67 F. 547; 73 F. 833.
243,343 Ore-crusher, P. W. Gates, 42 F. 49; 153 U. S. 332.
243,519 Corset back, A. B. Curtis, anticipates 440246, 75 F. 294; does not anticipate 440246, 77 F. 303.
243,545 Ore-crusher, P. W. Gates, 42 F. 49; 78 F. 350; 153 U. S. 332.
243,674 Sectional honey frame, J. Forncrook, 21 F. 328; 127 U. S. 176.
243,677 Paper pulp manufacture, G. W. Laraway, 28 F. 141.
243,678 Machine for moulding paper pulp barrels, G. W. Laraway, 28 F. 141.
243,917 Machine for flanging counters of boots and shoes, Hurlbut & Kennard, 77 F. 306; 80 F. 518.
244 100 Spring tooth harrow, West & Chase, 84 F. 670.
244,147 Tension for street car cable, H. Root, 53 F. 382; 58 F. 226.
244,224 Roof for burial vault, H. Q. French, 25 F. 41; 137 U. S. 239.
244,282 Bung fastener and cover, S. E Moore, 36 F. 185.
244,919 Paper box machine, G. Munro, 50 F. 425; 71 F. 884; 91 F. 147.
244,944 Lantern, J. B. Stetson, 28 F. 618; 29 F. 453; 31 F. 291; 41 F. 39.
244,997 Hot blast stove, J. Kennedy, 67 F. 339.
245,071 Bicycle handles, G. Illston, 50 F. 321.
245,158 Hot-air furnace, Goodenow & Owens, 32 F. 78.
245,251 Revolving dip-net, T. F. Williams, 19 F. 643.
245,318 Supply tank for water closet, J. Robertson, 80 F. 516.
245,350 See Reissue 10417.
245,542 Handles for velocipedes, T. W. Moran, 34 F. 886; 144 U. S. 239.
245,634 Lifting-jack, Jenne & Harmon, 48 F. 302; 53 F. 118.
246,075 Purifying vegetable oils, F. X. Byerley, 31 F. 73.
246,225 Wagon-gear, W. T. Shaver, 30 F. 68.
246,270 Hand glass, K. L. Zeum, 16 F. 539.
246,492 Electric railway signaling apparatus, O Gassett, 68 F. 913; 68 F. 914; 69 F. 833; 87 F. 906; 96 F. 761.
246,606 Door for cooking stove, G. F. Filley, 25 F. 282; 30 F. 434.
246,608 Ore-crusher, P. W. Gates, 42 F. 49; 78 F. 350; 153 U. S. 332.
246 748 Burglar proof safe, A. Gerard, 48 F. 380; 54 F. 889; 61 F. 209.
246,774 Lantern, J. Hirth, held not to infringe 104318 and 151703, 29 F. 447.
247,032 Button fastener, Farnsworth & Barnes, 28 F. 371.
247,103 Circuit breaker for electric lamps, C. G. Perkins, 62 F. 588; 66 F. 313.

247,152 Process of making starch from corn, A. Behr, 79 F. 957; 84 F. 977.
247,153 Apparatus for making starch from corn, A. Behr, 79 F. 957; 84 F. 977.
247,338 Corn sheller, L. Gillett, 91 F. 254.
247,472 Rocking chair, Biersdorf & Bunker, 46 F. 109; 58 F. 217.
247,665 Continuous rolling mill, C. Lewis, 55 F. 877; 59 F. 129.
247,766 Buttonhole cutter, G. W. Korn, 33 F. 50.
247,795 Cigarette machine, J. A. Bonsack, 70 F. 383.
247,855 Oil and sprinkling can, E. Smalley, 110 F. 203.
247,872 Rotary rock drill, Ball & Case, 29 F. 288.
247,882 Hominy mill, E. R. Burns, held not to infringe Reissue 10-057, 26 F. 636.
247,910 Sectional steam boiler, M. W. Hazelton, 50 F. 196.
247,925 Apparatus for enriching gas, J. Kidd, 33 F. 712; 35 F. 588.
247,931 Rolling mill. C. Lewis, 55 F. 878.
248,094 See Reissues 10419 and 10420.
248,179 Photographic film holder, D. H. Houston, 62 F. 400.
248,206 See Reissue 10348.
248,252 Broom, Bradshaw & Richardson, 80 F. 732.
248,269 Furniture nails, Bailey & Talbot, in interference with 370-614, 61 F. 650.
248,272 Skate, E. H. Barney, 15 F. 810.
248,277 Reversing-gear for steam engines, F. L. Bliss, 43 F. 437; 57 F. 637.
248,420 Electric light fixture, T. A. Edison, 86 F. 124.
248,544 Lasting and fastening machine, E. Woodward, 53 F. 481; 60 F. 283; 63 F. 609; 75 F. 272; 82 F. 97.
248,598 Belt pulley, P. Medart, 158 U. S. 68.
248,646 Apparatus for drawing and cooling beer, C. Gordan, 24 F. 743; 40 F. 155; 150 U. S. 387.
248,827 Automatic fire-extinguisher, F. Grinnell, 43 F. 590.
248,908 Hydraulic elevator, C. W. Baldwin; 56 F. 718; 76 F. 767.
248,982 Rotary drill, Ball & Case, 29 F. 288.
248 990 Railway switch, J. Brahn, 87 F. 481; 90 F. 493.
249,102 Manufacture of car wheels, J. K. Sax, 30 F. 835.
249,278 Axle-bearings, A. E. Wallace, 34 F. 896; 144 U. S. 254.
249,321 Banjo, H. C. Dobson, 39 F. 276; 149 U. S. 117.
249,332 Mixture for brewing, F. J. Geis, 36 F. 106.
249,842 Vapor burning stove attachment, Klein & Woodward, 68 F. 717.
249,884 Broom, J. W. Bradshaw, 80 F 732.
249,970 Art of recovering rubber from waste, N. C. Mitchell, 68 F. 570; 71 F. 179.
250,096 Machine for soldering side seams of cans, E. Norton, 67 F. 236; 83 F. 512
250,201 Sulphonated rosaniline coloring compound, H. Caro, 29 F. 853.

250,247 Rosaniline color manufacture, J. Holliday, 12 F. 147; 29 F. 853; 78 F. 393.
250,266 Machine for making seams of sheet metal cans, F. M. Leavitt, 67 F. 236; 83 F. 512.
250,656 Ore crusher, P. W. Gates, 42 F. 49; 78 F. 350; 153 U. S. 332.
250,700 Machine for pointing skewers, L. Anderson, 91 F. 784.
250,954 See Reissue 10139.
251,147 Platform adjuster for harvester, J. W. Webster, 40 F. 237.
251,246 Glove fastener, King & Hammond, 48 F. 305.
251,456 Processing apparatus, F. C. & A. K. Nicodemus, 19 F. 260.
251,470 Machine for felting hat-bodies, J. R. Russell, 41 F. 216.
251,596 Incandescent electric lamp socket, E. H. Johnson, 60 F. 401; 66 F. 309.
251,630 Mattress supporting frame, F. A. Palmer, 96 F. 100; 102 F. 693.

1882

251,790 Door-check, L. C. Norton, 26 F. 320.
252,002 Storage battery, C. A. Faure, 38 F. 119; 40 F. 328; date of invention fixed, 41 F. 679; 44 F. 602; priority considered, 52 F. 130; 53 F. 796; 55 F. 485; 57 F. 605.
252,054 Bake oven, E. A. C. Peterson, 25 F. 486.
252,230 Target trap, G. Ligowski, 34 F. 329; 35 F. 759.
252,280 Bicycle seat, C. H. Veeder, 34 F. 886; 144 F. 238.
252,400 See Reissues 10375 and 10376.
252,576 Telephone switch board, L. B. Firman, 86 F. 769.
252,646 See Reissue 10359.
253,156 Wax thread sewing machine, D. H. Campbell, 47 F. 118; 83 F. 208; 86 F. 141.
253,256 Shirt, J. G. Barker, 62 F. 593.
253,506 Cash register, M. Campbell, 47 F. 212; 53 F. 367; 70 F. 709.
253,572 Spindle support for spinning machines, J. E. Atwood, 52 F. 590; 54 F. 693; 55 F. 979; 56 F. 110; 57 F. 653; 69 F. 837; 75 F. 301; 83 F. 693.
253,661 Mangle, J. F. Baldwin, 28 F. 99.
253,721 Manufacture of dye stuffs, H. Koechlin, 60 F. 392; 61 F. 819.
253,781 Barbed wire machine, S. M. Stevens, 16 F. 669.
253,849 Banjo, E. I. Cubley, does not infringe 203604 or 249321, 149 U. S. 117.
253,996 Screw cutting dies, W. D. Forbes, 66 F. 318.
254,085 Plashed hedge. I. W Young. 51 F 109.
254,093 Car coupler, E. H. Janney. 92 F. 162.
254,106 Car coupling, C. Browning, 70 F. 622; 74 F. 794.
254,540 Egg and sugar beater, C. Deis, 21 F. 523.

254,847 Letter-file, J. S. Shannon, 36 F. 587.
254,869 Saw-sharpening machine, W. H. Halliday, 27 F. 217.
254,992 Corset, W. McCabe, 84 F. 161.
255,076 Machine for feeding and setting lacing hooks, A. Eppler, Jr., 67 F. 115; 70 F. 66.
255,122 Trunk fastener, J. H. Sessions, 49 F. 855; 60 F. 753; 63 F. 1001; 67 F. 163.
255,229 Hand stamp, C. C. Wilson, 26 F. 156.
255,353 Lubricator, A. W. Swift, held to anticipate 283931 and 257326, 29 F. 642.
255,485 Water closet, J. E. Boyle, 33 F. 48; 34 F. 752.
255,525 Cash carrier, J. C. Martin, 62 F. 272; 67 F. 786; 71 F. 519.
255,555 Washboard, C. H. Williams, does not infringe 223338, 129 U. S. 19.
255,597 Galvanic battery, Childs & Shaw, infringes 234413, 33 F. 507.
255,712 Twine binder, J. F. Appleby, 61 F. 256.
255,937 Plastic material, M. B. Church, 26 F. 620.
256,007 Stage effects, J. W. Knell, 44 F. 427.
256,083 Sheet metal roofing plate, J. Walter, 47 F. 307; 54 F. 385.
256,089 Steam heating apparatus, N. W. Williams, 41 F. 358; 64 F. 706; 77 F. 894; does not infringe, 187825, 80 F. 995; 96 F. 978.
256,504 Percolator for filtering, N. Rosenwasser, 22 F. 841; 129 U. S. 47.
256,619 Harrow, J. H. Barley, 92 F. 186; 95 F. 169.
256,744 Wagon-axle skein, J. Sandage, 42 F. 52.
257,027 Shade holder, D. Leary, 32 F. 832; 37 F. 680.
257,167 Asbestos rope steam joint packing, H. W. Johns, 60 F. 900; 77 F. 985.
257,277 Incandescent electric lamp socket, S. Bergmann, 60 F. 401; 66 F. 309
257,326 Lubricator, R. J. Hoffman, 29 F. 642.
257,837 Grain binder, J. F. Appleby, 61 F. 256.
257,860 Priming tool for reloading cartridges, J. H. Gill, 25 Ct. of Cls. 415.
257,888 Dredger and excavator, R. R. Osgood, 69 F. 620; 75 F. 670.
257,943 Freight and passenger elevator, P. Hinkle, 86 F. 338; 94 F. 155; 102 F. 957.
258,042 Grain elevator, F. J. Firth, does not anticipate Reissue 10-521, 75 F. 567. See Reissue 10521.
258,142 Middlings-purifier, G. T. Smith, 58 F. 382; 64 F. 581; 69 F. 94.
258,144 Water closet, R. D. O. Smith, 84 F. 352; 89 F. 297.
258,156 Glass annealing furnace, C. Tondeur, 28 F. 561; 37 F. 333; 51 F. 292; 55 F. 390; 55 F. 396.

258,236 Machine for moulding paper-pulp barrel heads, Laraway & Slate, 28 F. 141.
258,272 Process for making satchel bottom paper bag, D. Appel, 30 F. 63; 35 F. 752.
258,295 Incubator egg tray, A. M. Halstead, 52 F. 648; 62 F. 920; 64 F. 121.
258,334 Machine for folding and curling collars, T. S. Wiles, 27 F. 810.
258,352 Wind mill, G. M. Beard, 57 F. 219.
258,940 Cigar mold, Miller & Peters, 76 F. 823.
258,946 Gang-edger, J. A. Robb, 41 F. 143.
259,068 Machine for stretching saws, T. S. Wilkin, 46 F. 925.
259,235 Electric lamp fixture, L. Stieringer, 63 F. 126; 63 F. 840; 96 F. 247. See Reissues 11476 and 11498.
259,264 Threshing machine, C. Blinn, 36 F. 899.
259,394 Pump, W. D. Hooker, 68 F. 213; 76 F. 816.
259,416 Manufacture of paper boxes, E. B. & H. S. Munson, 77 F. 828; 81 F. 395.
259,550 Hay-rake, M. H. Kenaga, 33 F. 249; 69 F. 149.
259,597 Machine for making lacing hooks for shoes, S. N. Smith, 16 F. 414; 28 F. 854.
259,677 Machine for making wire chains for check-row corn-planters, R. Faries, 64 F. 587.
259,681 Stone breaker, P. W. Gates, 78 F. 350; 79 F. 75; 85 F. 441.
259,700 Pad for horse collars, E L. McClain, 33 F. 285; 141 U. S. 419.
259,958 Wood planer, B. D. Whitney, 48 F. 444.
260,050 Glove fastener, W. S. Richardson, 39 F. 700.
260,063 Waterproof fabric, G. Streat, 127 F. 572.
260,134 Fountain pen, M C. Stone, 45 F. 256; 84 F. 891.
260,232 Water closet Peters & Donald, 33 F. 48; 34 F. 752; 38 F. 831; 148 U. S. 270.
260,365 Device for inserting and clinching metallic staples, W. J. Brown, does not infringe Reissue 9803, 123 U. S. 589.
260,447 Cultivator coupling, Berlew & Kissel, 53 F. 578.
260,462 Separable pulley, Dodge & Philion, 76 F. 807; 85 F. 971; 86 F. 904; 92 F. 995; 101 F. 581.
260,526 Car-fare register, J. B. Benton, 22 F. 655; 26 F. 522; 30 F. 238.
260,654 Storage battery, C. F. Brush, 41 F. 679; 47 F. 48.
260,819 Process of making glassware, P. Arbogast, 88 F. 493; 90 F. 724.
260,959 Cigarette machine, C. G. & W. H. Emery, 70 F. 383.
261,026 Piston packing for pump, P. A. Myers, 67 F. 551.
261,054 Glass melting furnace, F. Siemens, 51 F. 902; 59 F. 151.
261,128 Ventilator fan, J. M. Blackman, 41 F. 436.

261,446 Sewing machine treadle, W. L Grout, 68 F. 224.
261,736 Refrigerator, C. H. Leonard, 29 F 310.
261,829 Carriage body, A. J. Calkins, 27 F. 296.
261,849 Machine and method for wrapping cigars, O. Hammerstein, 107 F. 290; 108 F. 967.
261,978 Rotary drill, R. Allison, 29 F. 288.
262,093 Time-lock, H. F. Newbury, 28 F. 454.
262,094 Time-lock, H. F. Newbury, 21 F. 579.
262,126 Cable railroad, H. Root, 37 F. 673; 146 U. S. 210.
262,169 Locomotive head light, E Wilhelm, 42 F. 843; does not infringe 235924, 47 F. 322; 50 F. 931.
262,505 See Reissue 10275.
262,761 Art of brewing malt liquors, J. F. Gent, 77 F. 883.
262,883 Cord holder for grain binder, J. F. Appleby, 28 F. 565.
262,977 Lock case, M. L. Orum, 37 F. 338; 149 U. S. 216.
263,075 Machine for felting hats, J. S. Taylor, 128 F. 741.
263,076 Machine for felting hats, J. S. Taylor, 128 F. 741.
263,087 Process of making whiskey, Allen & Bradley, 37 F. 533.
263,140 Dynamo, T. A. Edison, 35 F. 135.
263,412 Vault light, P. H. Jackson. 47 F. 703; 56 F. 582.
263,467 Trimming device for overedge sewing machine, J. Bigelow, 105 F. 970; does not invalidate 341790, 110 F. 210; 112 F 535.
263,900 Theatrical appliance, W. Hanlon, 56 F 600.
264,054 Spindle bearings, G H. Allen, 37 F. 794.
264,139 Drive chain, J. M Dodge, 78 F. 485; 81 F. 391.
264,308 Artificial flowers, J. Lambert, 46 F. 767.
264,568 Furnace for privies, W. S. Ross, 54 F. 166; 71 F. 965; 105 F. 510.
264,586 Soda water apparatus, F. S Waldo, 92 F. 623.
264,603 Potato digger L. A Aspinwall, 32 F. 703.
264,642 Electric distribution and translation system, T. A. Edison, 40 F. 666; 55 F. 490; 63 F. 588.
264,668 Dynamo regulator, T. A. Edison, 88 F 267.
264,837 Power press for punching and forging metal, H. B. Kinney, 68 F. 500.
264 854 Stylographic pen, F. C. Brown, 27 F. 77.
265,061 Letter and figure, J. Gunning, 11 F. 511; 22 F. 653; 23 F. 668.
265,145 Fare register, N. A. Ransom. 22 F. 655; 26 F. 522.
265,311 Incandescent electric lamp, T. A. Edison, 60 F. 401; 66 F. 309.
265,689 Turbine water wheel, J. B. McCormick, 73 F. 109.
265.733 Drawers, R. H. Anderson, 129 U. S. 70.
265,777 Method of treating carbons for incandescent electric lamp, T. A. Edison, 52 F. 300.
265,957 Stone braker, P. W. Gates, 78 F. 350.

266,090 Storage battery, C. F. Brush, 41 F. 679; 47 F. 48; 52 F.130; 53 F. 804
266,185 Bustles, H. W. Moulton, 18 F. 601.
266,262 Storage battery, W. A. Shaw, 38 F. 119.
266,525 Embroidery, A. L. Rice, 66 F. 755; 89 F. 598; 89 F. 1021; 89 F. 1022; 89 F. 1023.
266,783 Trimming attachment for sewing machines, J. W. Dewees, 119 F. 367.
266,806 Railroad train signalling apparatus, E. T. Gilliland, 89 F. 670.
266,895 Sulky road wagon, J. Robinson, 58 F. 402.
266,909 See Reissue 10689.
266,913 Bundle compressor for harvester, J. F. Steward, 40 F. 236.
266,941 Button fastener, A. G. Wilkins, 89 F. 982.
266,949 Grain adjuster for harvester binders, Bullock & Appleby, 61 F. 256.
267,011 Pad for horse collars, E. L. McClain, 33 F. 285; 141 U. S. 419.
267,014 Can heading machine, E. Norton, 45 F. 637; 49 F. 859; 57 F. 927; 57 F. 929; 59 F 137; 61 F. 293; 64 F. 662; 70 F. 833; 79 F 793; 81 F. 494; 90 F 415.
267,032 Fanning mill, W. Sperry, 96 F. 975; 111 F. 388.
267,047 Coal mining machine, G. D. Whitcomb, 47 F. 315; 47 F. 661.
267,098 Flour bolter, J. Mills, 56 F. 589; 60 F. 81; 65 F. 996; 72 F. 496.
267,180 Fountain pen, J. Friedman, 30 F. 188.
267,192 Method of winding silk, J. M. Grant, 38 F. 594; 148 U. S. 547.
267,422 Incubator, A. M. Halstead, 62 F. 920.
267,430 Lubricator attachment, R. J. Hoffman, does not anticipate 645026, 146 F. 252.
267,455 Ammoniacal detergent compound, C. C. Parsons, 58 F. 787.
267,492 See Reissue 10282.
267,751 Spiral punch, D. Kennedy, 97 F. 807; 101 F. 265; 108 F. 963.
267,774 Paper bag machine, C. A. Chandler, 29 F. 787.
268,112 Opera glass handle, W. Mack, 43 F. 70; 44 F. 346; 49 F. 857; 52 F. 819; 59 F. 468.
268,369 Button sewing machine, J. Mathison, infringes 236350, 41 F. 52; 129 U S. 263.
268,411 Movable dam, A. Kirk, 33 F. 252; 158 U. S. 58
268,932 Pack strap, C. Poirier. 70 F. 617.
268,972 Mince pie compound. H. J. Allen, 59 F 470; 63 F. 475.
268,988 Safety device for checks and drafts, M. F. Berry, 77 F. 833; 84 F. 646.

269,159 Sheet delivering mechanism for printing machines, L. C. Crowell, 27 F 204.
269,224 Steam heating pipes. E. F. Osborne, 61 F. 683.
269,242 Spring bed bottom, J. G. Smith, 52 F. 149; 58 F. 705.
269,329 Bed plate for steam engine, R. Scheidler, 23 F. 887.
269,340 Pyroxyline compound, J. H. Stevens, 42 F. 159.
269,343 Pyroxyline compound, J. H. Stevens, 42 F. 159.
269,344 Pyroxyline compound, J. H. Stevens, 42 F. 159.
269,480 Composite pavement, P. Stuart, 34 F. 320; 36 F. 378; 37 F. 90.
269,519 Stretching belting and apparatus therefor, M. Gandy, 28 F. 573.
269,535 Cake machine, W. S. Ovens, 39 F. 388.
269,623 Roller mill, H. Birkholz, 43 F. 528; 156 U. S. 261.
269,728 Crosscut saw, G F. Simonds, 63 F. 584.

1883

269,863 Stairs, P. H. Jackson, 47 F. 703; 56 F. 582.
270,133 Photographic camera, W. Schmid. 37 F. 345.
270,239 Making furniture nails, J. W. McCrillis, 50 F. 929.
270.327 Wardrobe bedstead, R. F. Meissner, held not to infringe 204-321, 26 F. 100.
270,453 Spring bed, J. J. McCormack, 44 F. 763.
270,522 Telephone switch, T. A. Watson, 81 F. 572.
270,528 Air brake valve, G. Westinghouse, Jr., 111 F. 741.
270,767 Telegraph transmitting key, E. A. Edwards, 28 F. 85; 31 F. 80; 139 U. S. 601.
270.867 Electric railway signaling apparatus. G. Westinghouse, Jr., 68 F. 913; 68 F. 914; 69 F. 833; 87 F. 906; 96 F 761.
270,936 Plug tobacco press, De Forest, does not anticipate 384893, 92 F 391.
271,276 Hay carrier, G. D. Rowell, 96 F. 232.
271,363 Cash register, Ritty & Birch, 47 F. 212; 99 F. 565; 156 U. S. 502.
271,398 Meat chopper, J. G. Baker, 28 F. 185; 34 F. 135; 46 F. 854; 48 F. 453; 53 F. 791; 72 F. 262; 80 F. 537.
271,426 Sewing machine treadle, H Cramer, 68 F. 201; 109 F. 652; 192 U. S. 265.
271,510 Bed bottom or hammock, I. E. Palmer, 70 F. 490; 92 F. 365.
271,727 Cable railway, D. J. Miller, 56 F. 149; 68 F. 227; 70 F. 853.
271,823 Die for forging car wheel tires, Facer & Shaub, 38 F. 231.
271,839 Seed cleaner, J. Grube, 28 F. 567.
271,943 Straw stacker. Stone & Shepler, 55 F. 297.
272,233 Stone breaker, P. W. Gates, 78 F. 350.
272,304 Tool holder for lathe, C. Muller, 69 F. 738; 77 F. 621.
272,311 Hammock, I. E. Palmer, 84 F. 829; 93 F. 464.
272 354 Machine for cutting box patterns, J. M. Titus, 58 F. 880.

272,554 Street railroad rail, T. L. Johnson, 47 F. 586; 51 F 762.
272,598 Grain binder, J. F. Steward, 40 F. 236; 155 U. S. 286.
272,660 Insulated electric conductor, A. A. Cowles, 32 F. 82; 35 F. 68; 144 U. S. 11.
272,670 Traction engines, J. H. Elward, 102 F. 903; 106 F. 314; 113 F. 946.
273,023 Embossed card, Butler & Kelley, 29 F. 142.
273,298 Furniture caster, H. Ogborn, held not to infringe 190152, 26 F. 272.
273,301 Order holder, Page & McCleery, 63 F. 841.
273,377 Electric railway signalling apparatus, C. J. Means, 68 F.913; 68 F. 914; 69 F. 833; 87 F. 906; 96 F. 761.
273,450 Switch stand, J. Brahn, 35 F. 64.
273,525 Store service apparatus, H. H. Hayden, 30 F. 824.
283,526 Store service apparatus, H. H. Hayden, 30 F. 824.
273,569 Method of making hydrogen peroxide, C. Marchand, 26 F. 629; 132 U. S. 195.
273,585 Fireproof safe, M. Mosler, 22 F. 901; 127 U. S. 354.
273.630 Rocking chair, A. B. Stevens, 46 F. 109.
273,773 Wooden plate, S. H. Smith, 60 F. 285.
273,869 Underground cable, W. & T. G. McMahon, 52 F. 124.
273,904 Steam pile driver, T. M. Skinner, 39 F. 870.
273,931 Leather skiving machine, C Amazeen, 39 F. 612.
274 048 Feed water heater and purifier, E. R. Stilwell, 49 F. 738; 57 F. 731.
274,145 See Reissue 10418.
274,264 Pretzel or bretzel cutter, Butler, Earhart & Crawford, 27 F. 219; 137 U. S. 21.
274,290 System of electrical distribution, T. A. Edison, 35 F.234; 95 F. 670; 101 F. 831.
274,325 Electric clocks, V. Himmer, 19 F. 322.
274,359 Sewing machine, Miller & Diehl, 34 F. 393.
274,363 Can ending machine, Norton & Hodgson, 45 F. 637; 49 F. 859; 64 F. 662; 81 F. 494; 90 F. 415.
274 508 Roller mill, D. W. Marmon, 39 F. 26.
274,562 Process of suspending cable, C. E. Chinnock, 110 F. 199; 112 F. 531.
274,797 Cockle machine, J. Lucas, 83 F. 482.
274,915 Banjo, E. J. Cubley, 39 F. 276.
274,940 See Reissue 10347
274,941 Stapling machine for papers. I W. Heysinger, 52 F. 816; 61 F 405
275,092 Capsule machine, H. H. Taylor, 24 F. 701.
275,347 Static electric machine, P. Atkinson, 76 F. 368.
275,467 Brick machine, C. Chambers, Jr , 92 F. 630.
275,947 Split pulley, G. B. Sanborn, 42 F. 54; 74 F. 241; 101 F.584; 106 F. 935.

276,044 Steam pipe covering, P. Holt, 40 F. 880.
276,118 Carpet lining, J. H. Wingfield, 75 F. 661.
276,198 Machine for cutting wooden plates, S. H. Smith, 60 F. 285.
276,430 Gauge for forming artificial flower foundations, J. Lambert, 18 F. 653; 46 F. 767.
276,441 Cash carier, J. C. Martin, 67 F. 786; 71 F. 519.
276,639 Box nailing machine, Doig & Smith, 87 F. 991.
276,994 Potato planter, L. A. Aspinwall, 32 F. 697.
277,134 Stone crusher, F. A. Huntington, 89 F. 323; 91 F. 534; 91 F. 661; 95 F. 471; 109 F. 269; 121 F. 136; 130 F. 558.
277,161 Art of making hammocks, A. O. Rood, 64 F. 771; 78 F. 638.
277,177 Hydraulic dredging apparatus, A. W. Von Schmidt, infringes 318859 and 355251, 63 F. 572; 80 F. 121.
277,245 See Reissue 10488.
277,256 Ratchet wrench, W. D. Forbes, 66 F. 318.
277,422 Waffle irons, Parker & Williams. infringes 229280, 62 F. 389.
277,933 Artificial denture, A. S. Richmond, 22 F. 659; 30 F. 775; 30 F. 784.
277,941 Tooth crown, C. M. Richmond, 22 F. 659; 30 F. 775; 30 F. 779; 140 U. S. 55.
277,943 Artificial dentures, preparing roots of teeth for reception of, C M. Richmond, 22 F. 659; 140 U. S. 55.
278,294 Method of making sticky fly paper, O. Thum, 53 F. 84; 67 F. 911; 70 F. 65.
278,528 Hoistway cover controller, D. Fraser, 74 F. 792; 79 F. 442.
278,560 Velocipede saddle, T. J. Kirkpatrick, 64 F. 369.
278,639 Knotter for harvester, J. W Webster, 40 F. 237.
278,759 Setscrew, J. F Wollensak, 28 F. 427.
278,828 Process of cutting articles from wood, S. H. Smith, 60 F. 285.
278,839 Method of sewering and draining towns, G. E. Waring, Jr., 41 F. 47; 67 F. 141.
278,967 Process for making infant's food, W. Horlick, 120 F. 266.
279,094 Process of enameling ironware, E. Kegreisz, 53 F. 375; 53 F. 380; 54 F. 375; 55 F 292.
279,107 Automatic electric circuit opener, D. Rousseau, 66 F. 759; 78 F. 113.
279,259 Tables for tile machine, W. F. Leach, 18 F. 262; 24 F. 791.
279,502 Coal hod, H. S. Reynolds, infringes 279871, 27 F. 307.
279,537 Log carriage for saw mills, Carter & Seeley, 54 F. 511.
279,822 Corn planter, L. Schofield, 46 F. 768.
279,853 Can making machine, W. H. Atkinson, limits 281508, 92 F. 369.
279,871 Coal hod, method of making same, C. Hoff, 27 F. 307; 31 F. 45; 139 U. S. 326.

279,889 Hay elevator and carrier, F. B. Strickler, does not infringe 300687, 158 U. S. 260.
280,095 Machine for felting hats, J. S. Taylor, 128 F. 741.
280,421 Axle bearing, A. E. Wallace, 34 F. 896; 144 U. S. 254.
280,709 See Reissues 10631 and 11100.
281,091 Steering head for road vehicle, G. A. Long, 70 F. 855; 75 F. 835.
281,101 Book-binding, A. J. Magee, 34 F. 433,
281,183 Flying target, N. Fischer, 31 F. 466.
281,345 Electric gas lighting apparatus, C. H. Crockett, 41 F. 390; does not infringe Reissue 9743, 139 U. S. 481.
281,376 Glove fastener, E. J. Kraetzer, 58 F. 818.
281,408 Match making machine, W. H. H. Sisum, 78 F. 622.
281,508 Machine for making tin cans, W. Hipperling, 69 F. 344; 92 F. 369.
281,553 Dies for making dash-frames, G. M. Peters, 130 U. S. 626.
281,576 Safety catch for electric light circuits, L. Stieringer, 76 F. 804.
281 640 Fireproof safe, M. Mosler, 22 F. 901; 127 U. S. 354.
281,767 Can filling machine. M. Jensen, 93 F. 672; 100 F. 462.
281,964 Window screen frame, E. J. Brent, 83 F. 176.
282,002 Parti colored glassware, J. Locke. 26 F. 757.
282.090 Atomizer bulb, W. Kennish, 38 F. 411.
282,258 Belt fastener, H. Blake, 40 F. 646.
282 275 Letter file, W. A. Cooke, 31 F 43.
282,337 Gas burner, A. P. Lipsey, 47 F. 64; 54 F. 163.
282,991 Adjustable bale tie, I. A. Kilmer, 62 F. 119; 67 F. 1017; 74 F 561.
283,057 Rubber cloth, F. E. Aldrich, 37 F. 688; 149 U. S. 557.
283,136 Fireproof safe, M. Mosler, 22 F. 901; 127 U. S. 354.
283,167 Magnetic arc extinguisher, E. Thomson, 98 F. 105; 101 F. 587; 107 F. 277.
283,228 Mailing machine, A. Eppler, held to anticipate 308370 in part, 29 F. 293.
283,725 Bolt lock, E. W. Sprague, 37 Ct. of Cls. 447.
283 931 Lubricator. A. W. Swift, 19 F. 641; 29 F. 642.
283,962 Safety gas tank for vessels, S. R. Brick, 25 F. 553.
284.036 Riding attachment for plow, J. H. McBride, 40 F. 163; 44 F. 74; 72 F. 908; 97 F. 217.
284,049 Time lock, H. F. Newbury, 28 F. 752.
284,079 Watch regulator, D. Shive, 41 F. 434.
284,115 Brick mold sanding machine, J. A. Buck, 97 F. 614.
284,142 Time lock, H. F. Newbury, 28 F 752.
284,282 Pile driver, R. J. Cram, does not infringe 205244, 42 F. 909.
284,456 Cash carrier, J. C. Martin, 67 F 786; 71 F. 519.
284,506 Sash fastener, W. E Sparks, 20 F. 121; held not to infringe 212487, 27 F. 748.

284,716 Railroad signal, Blodgett & Hardy, 52 F. 867.
285,079 Sash balance, W. Shumard, 39 F. 39.
285,116 Portable elevated railroad, Curtis & Cook, 98 F. 619; 98 F. 620.
285,412 Wheel plow, G. W. Hunt, 52 F. 745.
285,452 Fireproof ceiling, P. B. Wight, 30 F. 787.
285,645 Enameled basin, Mulligan & Chaumont, 48 F. 452.
285,641 Scarf pin, G. W. McGill, 137 F. 97.
285,826 Stop cylinder press, T. McElroy, does not anticipate 340785, 103 F. 658.
285,916 Trunk lock, F. W. Mix, 52 F. 980; 64 F. 789.
286,115 Sheet metal spinner, J. Chaumont, 54 F. 517; 59 F. 143.
286,138 Manufacture of pepsin, C. L. Jensen, 59 F. 290.
286,143 Paper fastener, G. W. McGill, 45 F. 357.
286,211 Oil tank for street lamps, A. L. Mack, 39 F. 699; 41 F. 43; 48 F. 682.
286,264 Wire buckle, W. R. Clough, 100 F. 647.
286,360 Folding paper box, A. G. Wilson, 97 F. 813; 99 F. 985; 105 F. 191; 106 F. 189; 112 F. 1013; 125 F. 524.
286,709 Stage effects, J. W. Knell, 44 F. 427.
286,746 Waste trap, S. E. Thomas, 41 F. 343.
287,001 Stem winding watch, C. K. Colby, 43 F. 521; 50 F. 542; 50 F. 545; 71 F. 186; 75 F. 17.
287,177 Dating stamp, W. W. Sawyer, does not infringe 185862, 31 F. 282.
287,178 Caisson gate, G. F. Schild, 161 U. S. 10.
287,516 System of electrical distribution, T. A. Edison, 95 F. 670; 101 F 831.
287,564 Chain for bracelets, C. A. Muller, 27 F. 456.
287,772 Hay elevator track, J. Ney, 56 F. 152; 69 F. 405.
287,858 Photographic shutter, H. B. Perry, 99 F. 95.
287,932 Tubular lantern, C. J. Higgins, 47 F. 320; 58 F. 367.
288,048 Duplicate sales slips, J. H. Frink, 39 F. 802; 53 F. 573; 53 F. 577; 54 F. 882.
288,494 Railway car gates, W. W. Rosenfield, 26 F. 314; 132 U. S. 84.
288,536 Electric signal box, Wilson & Davis, 52 F. 468.
289,106 Holder for setting stones. S. Joel, 36 F. 593.
289,272 Velocipede saddle, T. J. Kirkpatrick, 64 F. 369.
289,380 Pneumatic door check, E. I. Blount, 66 F. 761; 75 F. 674.
289,397 Machine to make bricks of asphalt, A. Dietz, 75 F. 590.
289,488 Candy manufacture, L T. Yoder, 25 F. 821; 26 F. 273
289,507 Wire fence machine, W. J. Davisson, 108 F. 632; 189 U. S. 8.
289,518 Roller mill, D. E. Dowling, 39 F. 26.
289,524 Rolling mill, W. Garrett, 70 F. 1012.
289,571 Lamp burner, Schwintzer & Graff, 33 F. 279; 133 U. S. 697.

1883 (Concluded) 289,802—293,545

289,802 Heating stove, P. D. Beckwith, 50 F. 202; 58 F. 182.
289,872 Loom for making French harness, A. Urbahn, 83 F. 477.
289,928 Bottle stopper, A. F. Parkhurst, 26 F. 531.
290,050 Straw stacker, L. W. Hasselman, 29 F. 318.
290,067 Glove fastener, E. J. Kraetzer, 36 F. 309; 39 F. 790; 53 F. 245; 58 F. 818; 60 F. 399.
290,111 Cultivator, C. D. Reed, 41 F. 352.
290,190 Cash carrier, E. P. Osgood, 75 F. 27.
290,303 Card gilding machine, C. A. Wright, 44 F. 352.
290,358 Gang edger, J. A. Robb, 41 F. 143; 51 F. 446; 60 F. 408.
290,571 Method of separating corn in the stalk, S. B. Goddard, 51 F. 284; 60 F. 411.
290,697 Automatic musical instrument, A. McTammany, 90 F. 283.
290,761 Watch case spring, N. J. Felix, 54 F. 163.
290,811 Cigar maker's implement, T. Streat, 83 F. 700.
290,837 Fireproof fabric, J. S. Beer, 100 F. 465.

1884

291,139 See Reissue 10826.
291,521 Printing machine, W. P. Kidder, 64 F. 782; 69 F. 250; 70 F. 339; 79 F. 653; 86 F. 315; 101 F. 282.
291 606 Method of and tool for blasting rocks, J. L. L. Knox, 53 F. 790.
291,615 Paper slide box, T. Marburg, 99 F. 86.
291,784 Process for tawing hides, A. Schultz, 66 F. 986; 70 F. 1003; 75 F. 287; 77 F. 191; 81 F. 178; 84 F. 643; 84 F. 644; 93 F. 811.
291,785 Process of tawing hides, A. Schultz, 66 F. 986; 70 F. 1003; 75 F. 287; 77 F. 191; 81 F. 178; 84 F. 643; 84 F. 644; 93 F. 811.
291,964 Fountain pen, W. H. Wales, 30 F. 188.
292,147 Vehicle spring, C. L. Thomas, 46 F. 523.
292,313 Lead holder for pencils, J. Holland, 127 U. S. 396.
292,474 Match making machine, C. J. & J. M. Donnelly, 78 F. 622.
292,514 Boot stiffener mold and process of using same, N. J. Simmonds, 35 F. 517.
292,861 Railway brake shoe, G. P. Ross, 47 F. 894; 59 F. 902.
293,192 Cash carrier, B. A. & E. P. Osgood, 75 F. 27; 83 F. 201; 88 F. 286; 103 F. 489.
293,234 Button attaching device, C. H. Eggleston, 39 F. 792; 58 F. 220; 65 F. 96; 77 F. 288; 111 F. 1005.
293,314 Centrifugal creamer, G. DeLaval, 50 F. 87.
293,545 Fountain pen, L. E. Waterman, 29 F. 316; 55 F. 982; 121 F. 107; 123 F. 300; 125 F. 290; 128 F. 926; 138 U. S. 252.

293,552 Incandescent electric lamp socket, S. Bergmann, 60 F, 401; 66 F. 309.

293,725 Bicycle saddle, C. E. Duryea, 87 F. 945.

293,740 Method of filtering water, I. S. Hyatt, 58 F. 577; 61 F. 840; 66 F. 152; 77 F. 900; 80 F. 924; 82 F. 459; 83 F. 1013; 91 F. 421; 91 F. 422; 93 F. 827; 111 F. 179; 112 F. 678

293,826 Burnishing machinery, W. O. Way, does not infringe 241-750, 106 F. 83.

293,957 Pawl and ratchet, R. E. Ellrich, 88 F. 784; 92 F. 1021.

294,065 Can heading machine, Norton & Hodgson, 49 F. 859; 64 F. 662; 81 F. 494; 90 F. 415.

294,697 Combined gas and electric lamp fixture, L. Stieringer, 63 F. 126; 63 F. 840; 96 F. 247. See Reissue 11544.

294,764 Machine for trussing tubs, M Corcoran, 43 F. 892; 80 F. 293.

294,959 Plate holder for camera, T. H. Blair, 53 F. 483.

295,035 Suspender buckle, J. W. Bruff, 29 F. 214.

295,172 Cash and parcel carrying system, W. S. Hill, 29 F. 210.

295,180 Process of treating milk, G. Lawrence, 96 F. 234.

295,205 Pipe moulding apparatus, F. Shickle, 29 F. 866.

295,259 Refrigerator, H. H. & H. T. Lovell, held not to infringe 261736, 29 F. 310.

295,270 Lock for piano, F. W. Mix, 58 F. 563.

295,285 Magazine gun, A. H. Russell, 95 F. 634.

295,286 Magazine gun, A. H. Russell, 97 F. 634.

295,302 See Reissue 10867.

295,513 Wire barbing machine, G. C. Baker, 36 F. 692.

296,021 Cloak, J. Landesmann, 32 F. 590.

296,210 Circular knitting machine, W. Osborne, 31 F. 402.

296,377 Means for driving spindles by bands, J. E. & E. Atwood, 52 F. 475; 55 F. 979.

296,460 Art of making hammocks, A. O. Rood, 64 F. 771; 78 F. 638.

296,501 Ice chipping tool, H. Albrecht, 103 F. 646.

296,623 Die for securing heel-plates to rubber shoes, F. Richardson, 33 F. 281; 33 F. 838; 36 F. 689.

296,624 Machine for securing heel-plates to rubber shoes, F. Richardson, 33 F. 281; 36 F. 689.

297,066 Muffler for safety value, J. M. Coale, anticipates 299503, 52 F. 314.

297,108 Rocking chair spring, W. I. Bunker, 58 F. 217.

297,382 Slashed metallic screening, J. F. Golding, 103 F. 287; 111 F. 395.

297,471 Machine for felting hats, J. S. Taylor, 128 F. 741.

297,671 Brick machine, C. Chambers, Jr., 92 F. 630.

297,675 Brick machine, C. Chambers, Jr., 92 F. 630.

297,699 Supporting pin for electric insulators, J. M. Klein, 63 F.702; 77 F. 200.
297,917 Brick machine, C. Chambers, Jr., 92 F. 630.
297,975 Hydraulic jack, R. H. Dudgeon, 29 F. 248.
297,980 Glove fastener, W F. Foster, 76 F. 979.
298,018 Paint can, E. Norton, 39 F 545.
298,249 Mowing machine, E. Smith, 20 F. 795; 40 F. 87.
298,303 Collar button, G. Krementz, 39 F. 323; 148 U. S. 556.
298,425 Machine for creasing paper, J. E. Stannard, 32 F. 696.
298,441 Snow plow, P. B. Brazel. 89 F. 584.
298,626 Pad fastening for horse collars, J. Scherling, 33 F. 285; 141 U. S. 419.
298,658 Incandescent electric lamp socket, S. Bergmann, 60 F. 401; 66 F. 309.
298,856 Carpet stretcher, F. J. Hubbard, held not to infringe 154848, 27 F. 64.
298,879 Box covering and trimming machine, G. Monroe, 32 F. 585; 91 F. 147.
299,203 Ceiling plate, R. T. Crane, May 27, 1884, not infringed, (C. C. N. D. Ill.) Crane v Douglass, decided in 1900, not reported.
299,327 See Reissue 10834.
299,503 Muffler for safety valve, H. G. Ashton, 50 F. 100; 52 F.314.
299,660 Gas burner, A. P. Lipsey, 47 F. 64; 54 F. 163.
299,815 Fruit press, D. Lille, 75 F. 283.
299,825 Can heading machine, C. R. Merriam, infringes 267014, 59 F. 137.
299,895 Shuttle for weaving wire cloth, G. F. Wright, does not infringe 239011, 67 F. 790.
300,333 Hydraulic dredging apparatus, A. W. Von Schmidt, infringes 318859 and 355251, 63 F. 572; 80 F. 121.
300,508 Glove fastener, W. S. Richardson, 39 F. 700.
300,509 Glove fastener, W. S Richardson, 39 F. 700.
300,510 Glove fastener, W. S. Richardson, 39 F. 700.
300,687 Hay elevator and carrier, J. M. Boyd, 37 F. 887; 96 F. 232; 158 U. S. 260.
300,690 Hoisting and conveying machine, A. E. Brown, 107 F. 498; 108 F. 966.
300,720 Art of recovering rubber from waste, N. C. Mitchell, 68 F. 570; 71 F. 179
300,744 Shawl strap, E. A. Whittelsey, 53 F. 810.
300,828 Electric street car motor truck, A. W. Adams, 63 F. 986; 77 F. 432.
300,847 Jump seat, J. T. Clarkson, 58 F. 581; 63 F. 607.
301,087 Machine for sanding brick molds, J. A. Buck. 72 F 777; 77 F. 614; 97 F. 614.
301,190 Knotter for harvester, J. W. Webster, 40 F. 237.

301,245 Wheel-rim, E. G. Latta, 46 F. 789.
301 596 Roll-paper holder and cutter, R. W. Hopking, 45 F. 686; 51 F. 237; 59 F. 147.
301,720 Steam engine governor, A. L. Ide, 31 F. 901; 39 F. 548; 149 U. S 550.
301,729 Disk harrow, C. La Dow, 88 F. 702.
301,884 Overshoe buckle, King & Hammond, 48 F. 305; 48 F. 834; 49 F. 274; 52 F. 587; 58 F. 411; 72 F. 171.
301,908 Target trap, P. Marqua, anticipates Reissue 10867, 58 F. 227; 97 F. 44; 102 F. 354.
302,055 Machine for felting hats, J. S. Taylor, 128 F. 741.
302,294 Refrigerating machine, J. J. Suckert, 35 F. 143.
302,338 Construction of buildings, P. H. Jackson, 47 F. 703; 56 F. 582.
302,449 Friction clutch for traction engine, J. C. Titus, 102 F. 903; 106 F. 314; 113 F. 946.
302,548 Harness pad, Dorr & Tamplin, 56 F. 296.
302,666 Watercloset basin, S. G. McFarland, 30 F. 621.
302,691 Trap for throwing targets, B. Teipel, 35 F 759.
303,006 Store service apparatus, H H. Hayden, 45 F. 245; 59 F. 776.
303,036 Rolls for rolling metal blooms, A. J. Moxham, 68 F. 212.
303,116 Machine for rounding bent handles, A. K. Caverly, 52 F. 758; 66 F. 305.
303,374 Rag engine for paper making, J. Hoyt, 35 F. 830; 145 U. S. 302.
303 393 Spring bed bottom, F. J. Maier, 95 F. 159.
303,441 Steam exhaust head, W. C. Lyman, 75 F. 665.
303,547 Shoe clasp, E. S. Smith, 38 F. 604.
303,596 Shoe clasp, E. S. Smith, 38 F. 604.
303,714 Telephone exchange apparatus, H. H. Eldred, 106 F. 215.
303,716 Satchel latch, R. Flocke, 67 F. 547; 73 F. 833.
303,984 Machinery for making wax tapers, G. W. Coddington, 105 F. 951; 111 F. 378.
304,033 Coal hod, H. S. Reynolds, 139 U. S. 326
304,154 Manufacture of painted wire cloth, Wickwire & Cortland, 41 F. 37.
304,172 Scale pan, G. H. Chatillon, 96 F. 342
304,195 Steam generator, H. Heine, 43 F. 786.
304,365 Hydro-carbon furnace, A. H. Shipman, 34 F. 747; 62 F. 395.
304,391 Draw bar for railway cars, D. St. Clair Wineland, 41 F. 765.
304,549 Mechanical movement, F. L. Palmer, Sept. 2, 1884, does not anticipate 535465, (C. C., N. D. N. Y.) 144 F. 429.
304,550 Mechanical movement, F. L. Palmer, anticipates 303981, 84 F. 454; does not anticipate 308981, 92 F. 925.
304,863 Railway car brake, H. Root, 52 F. 863; 60 F. 90.

305,057 Process and compound for dyeing hair, C. A. C. de Barbaran, 69 F. 616; 77 F 612.
305,118 Sticky fly paper, O. Thum, 53 F. 84; 67 F. 911; 70 F. 65.
305,172 Stone breaker, P. W. Gates, 78 F. 350.
305,238 Metal tooth crown, M. Rynear, 83 F. 696.
305,410 Clasp for overshoes, J. J. Unbehend, 32 F. 792; anticipates 336769, 41 F. 520.
305,867 Capsule cutter, W. A. Tucker, 24 F. 701; 28 F. 132.
305,882 Watchman's time detector, W. Bauer, 94 F. 524
306,021 Glove fastener, E. J. Kraetzer, 36 F. 309; 39 F. 790; 53 F. 245; 58 F. 818; 60 F. 399.
306,368 Hydraulic dredging apparatus, A. W. Von Schmidt, infringes 318859 and 355251, 63 F 572; 80 F 121.
306 463 Buffing wheel, R. Binns, 70 F. 711.
306,469 Sewing machine treadle, P. Diehl, 68 F. 201; infringes 271-426, 109 F. 652; does not infringe 271426, 192 U. S. 265.
306,980 Process of making incandescent lamp filaments, E Weston, 33 F. 869; 51 F. 24; 58 F. 692
307,049 Pneumatic conductor for elevator signals, J. Hunt, 51 F. 678.
307,197 Can ending machine, E. Jordan, 49 F. 859; 97 F. 636.
307,456 Automatic fire extinguisher, F Gray, 32 F. 80; 35 F. 513.
307,491 Can ending machine, Norton & Hodgson, 49 F. 859.
307,735 Fountain pen, L. E. Waterman, 55 F. 982; 123 F. 300; 125 F 290.
307,746 Composition for sealing wax, G. W. Coddington, 105 F.951; 108 F. 86; 112 F. 1016.
307,942 Gravity pleasure railroad, P. Hinkle, 119 F. 359; 127 F. 698.
308,095 Grain transferring apparatus, E. S. Richards, 40 F. 165; 102 F. 508; 158 U. S. 299; 159 U. S. 477.
308,112 Cooking oil meal, J. H. Vaile, 55 F. 652.
308,308 Supplemental gangway for ferry boat, C. W. Doten, 91 F. 248; 138 F. 406.
308,358 Water closet, F. B Hanson, Nov. 25, 1884, priority awarded to Reissue 10826, (C. C., S. D., N. Y.) Boyle v. Hanson, decided June 6, 1888, not reported.
308,370 Nailing machine, J. Nagle, 29 F. 293.
308,373 Railway switch, G. W. Parsons, infringes 248990, 90 F. 493.
308,498 Steam engine governor, A. L. Ide, 31 F. 901; 149 U. S. 550.
308 556 Cigarette machine, W. H Emery, 63 F. 835; 69 F. 335.
308,615 Machine for making paper pulp barrels, G. W. & W. P. Laraway, 28 F. 141.
308,616 Machine for making paper pulp barrels, G. W. Laraway, 28 F. 141.

308,787 Mechanism for handling lint cotton, R. S. Munger, 110 F. 390.
308,790 Cotton conveyor, R. S. Munger, 49 F. 61; 110 F. 390.
308,872 Friction clutch, W. D. Brock, 40 F. 465.
308,981 Machine lor quilting fabrics, F. L. Palmer, 57 F. 221; 84 F. 454; 92 F. 925; 99 F. 568; 118 F 52.
308,982 Machine for quilting fabrics, W. H. Palmer, 57 F. 221; 118 F. 52.
309,166 Machine for feeding and setting lacing hooks, S. N. Smith, infringes 255076, 67 F. 115; 70 F. 66.
309,238 Keeper plate for locks, F. W. Mix, 58 F. 563.
309,617 Telephone call-box, E. Gray, 83 F. 842; 108 F. 952.
309,699 Trimming attachment for sewing machines, J. W. Dewees, 119 F. 369.
309,727 Steam generator, Morrin & Scott, 90 F. 285; 99 F. 977.
309,865 Hydraulic elevator, J. Moore, 56 F. 718; 76 F. 767.

1885

310,276 Portable cooking range, I Hayes, 88 F. 278; 90 F. 707.
310,776 Velocipede, W. P. Benham, 34 F. 887; 144 U. S. 239.
310,934 Button attaching machine, J. F. C. Dick, 57 F. 648.
310,966 Roller coasting structure, L. M. A. Thompson, 89 F. 321; 93 F. 824.
310,973 Lifting jack, J. D. Baillie, anticipates 643599, 115 F. 493.
311,100 Electric lamp socket, S. Bergmann, 72 F. 274; 83 F. 473.
311,171 Thread protector for wrought iron pipes, M. Blakey, 78 F. 368; 98 F. 890.
311,325 Marine torpedo, J. A. Howell, 111 F. 906; 118 F. 1016.
311,554 Fountain pen. P. E. Wirt, 30 F. 188; 32 F. 284; 45 F. 256.
311,623 Folding bed, L. W. Welch, 37 F. 693; 51 F. 675.
311,768 Flying target, G. Ligowsky, 31 F. 466.
312,086 Compressor for paper files, W. H. H. Cleague, 73 F. 684.
312,158 Main for water distribution, S. B. Peeney, 35 F. 586.
312,220 Ribbed fabric for carpets, Priestley & Kunkler, 47 F. 650.
312 259 Street railroad chair, B F. Curtis, 56 F. 596.
312,316 Lifting jack, J. Barrett, 57 F. 748; 59 F. 772; 100 F. 357; 113 F 264.
312,473 Bicycle brake, T. B. Jeffery, 84 F. 968.
312,599 Storage battery, J. W. Swan, 38 F. 119. See Reissue 11-047.
312,987 Button setting machine, E. O. Ely, 39 F. 792.
313,064 Apparatus for dipping matches. Eddy, Millin & Mousseau, 65 F. 803.
313,212 Rifle front sight cover, J. C. Kelton, 32 Ct. of Cls. 314.
313,224 Linotype machine, O. Mergenthaler, 46 F. 114; 57 F. 502; 64 F 799.

313,429 Platform rocking chair, Kenna, 46 F. 109.
313,394 Plow, L. B White, 47 F. 819.
313,583 Moulding wall coping, J. Francy, 47 F. 313.
313,804 Target trap, J. Bloom, 34 F. 329; 35 F 759.
313,874 Stove oven doors, D. G. Littlefield, 30 F. 434.
313,910 Stave fruit basket, R. S. Bartlett, 41 F. 393.
314,027 Thermo pneumatic temperature regulator, W. S. Johnson, 81 F. 626; 85 F. 863.
314,142 Bicycle saddle, T. J. Kirkpatrick, 34 F. 893; 64 F. 369; 144 U. S. 248.
314,170 Mileage ticket, J. P. Eastman, 39 F. 552.
314,189 Dies for forging ox-shoes, W. Pearce, 30 F. 366.
314,192 Method of forging ox-shoes, W. Pearce, 30 F. 366.
314,204 Staple fastener for wooden vessels, W. O. Swett, 96 F. 344; 101 F. 269; 108 F. 873.
314,459 Car truck bolster, H. C. McCarthy, 43 F. 384; 160 U. S. 110.
314,724 Satchel handle, W. Roemer, 71 F. 407; 78 F. 117.
314,884 Dry closets, I D. Smead, 44 F. 614; 57 F. 626.
315,186 Knob locking and releasing mechanism for locks, G.E. Thaxter, 32 F. 833.
315,408 Machine for cutting cigar wrappers, O. Hammerstein, 107 F. 290; 108 F. 967; 115 F. 526.
315,537 Rubber tire, A. H. Overman, 49 F. 859.
315,672 Bridle, G. L. Smith, 93 F. 466.
315,855 Brick machine, A. D. Thomas, 76 F. 455.
315,898 Street car seats, G. M. Brill, 75 F. 1002.
316,034 Manufacture of corset stays, M. W. Henius, 30 F. 838.
316,401 Magazine fire-arm, S H. Roper, 85 F. 448; 99 F. 294.
316,411 Casing for locks, H. L. Spiegel, 37 F. 338; 150 U. S. 38.
316,422 Lamp burner, G. H. Wilson, 48 F. 681; 54 F. 495.
316,458 Wire fence, W. Hewitt, 99 F. 286.
316,564 Photographic shutter, C. C. Packard, 64 F. 381.
316,639 Drinking trough, J. Moore, 30 F. 622.
316,995 Chair for railroads, A. J. Moxham, does not infringe 312259, 56 F. 596
317,049 Photographic film tension, Walker & Eastman, 62 F. 400; 64 F. 491.
317,109 Hay elevator. J. M. Foote, 96 F. 232.
317,202 Hydraulic elevator, G H Reynolds, 56 F. 718; 68 F. 665; 71 F. 876; 76 F. 767.
317,622 Abrading disk for polishing boot heels, J. G. Buzzell, 79 F. 328; 79 F. 329; 96 F. 997.
317,663 Reciprocating movement for printing machinery, P. Miehle, 96 F. 226; 102 F. 159.
317,676 Electric light, Sawyer & Man, 25 F. 719; 40 F. 21; 159 U. S. 465.

317,828 Linotype machines, O. Mergenthaler, 46 F. 114; 57 F. 502; 64 F. 799.

318,040 Relief valve for beer vessels, J. C. Schaefer, anticipates 222-975, 60 F. 93.

318,168 Automatic lubricator for steam engines, C. Couse, 35 F. 509.

318,508 Automatic fire extinguisher, M. Ruthenburg, 32 F. 166.

318,533 Furniture caster, J. Berkey, 110 F. 976; 113 F. 162.

318,684 Door knob, C. H. Beebe, 32 F. 87.

318,731 Shoe upper machine, C. B. Hatfield, 52 F. 150.

318,824 Rifling machine for heavy guns, J. R. Street, 35 Ct. of Cls. 556.

318,828 Storage battery, J. W. Swan, 38 F. 119.

318,859 Hydraulic dredging apparatus, A. B. Bowers, 63 F. 572; 69 F. 640; 77 F. 980; 80 F. 119; 80 F. 121; 81 F. 569; 83 F. 950; 87 F. 293; 91 F. 381; 99 F. 745; 105 F. 525.

318,860 Art of dredging, A. B. Bowers, 81 F. 569; 91 F. 381; 99 F. 745; 105 F. 525.

319,095 Holder for setting stones, S. Joel, 36 F. 592.

319,125 Process of using asphaltum for paving, Rice, Steiger & Thurber, 41 F. 383; 48 F. 300; 62 F. 281; 80 F. 737.

319,215 Spring calipers and dividers, C. P. Fay, 96 F. 244; 100 F. 93.

319,694 Rolling mill plant, W. Garrett, 70 F. 1012.

319,754 Face for car axle die, G. F. Simonds, 90 F. 201; 93 F. 958.

319,795 Process of smelting ores by electricity, E. H. Cowles, 83 F. 492; 102 F. 618.

319,937 Syringe, B. F. Sutton, 38 F. 413.

319,945 Electric smelting furnace, E. H. & A. H. Cowles, 83 F.492; 102 F. 618.

319,997 Cuff buttons, G. D. Paul, 48 F. 310.

320,066 Floor and sidewalk construction, P. H. Jackson, 112 F. 361.

321,340 Can for obtaining cream from milk, F. G. Butler, 50 F. 423; 56 F. 143.

321,376 Machine for swaging and jointing saws, W. Lyon, 34 F. 790.

321,726 Steam engine cross head lubricator, A. L. Ide, 89 F. 491.

321,749 Method of regulating electric lights, W. J. & S. B. Paine, does not anticipate 393323, 91 F. 142.

321,833 Fire cracker, C. E. Masten, 51 F. 216; 55 F. 78.

322,017 Knife for cutting wooden disk blanks, S. H. Smith, 60 F. 285.

322,060 Can heading machine, E. Jordan, 49 F. 859; 64 F. 662; 81 F. 494; 90 F. 415.

322,194 Process of making chloroform, G. Michaelis, 34 F. 326; 38 F. 742; 91 F. 778.

322,309 Printing machine, R. Miehle, 96 F. 226; 102 F. 159.

322,344 Carrier attachment to folding machine, R. T. Brown, 46 F. 72; no interference with 343677, 57 F. 601; interference considered as with 343677, 58 F. 571.

322,366 Mattress, S. Fulton, 77 F. 885; 81 F. 959.

322,393 Clay disintegrator, C. & A. Potts, 44 F. 680; 77 F. 454; 97 F. 78; 108 F. 379; 109 F. 323; 126 F. 475; 155 U. S. 597.

322,465 Recleaner for grain and seed separators, A. Miller, 28 F.567; 29 F 322.

322,501 Rope fastener, T. Taylor, 64 F. 375.

322,714 Target trap, A. H. Hebbard, does not infringe Reissue 10837, 58 F. 227.

323,162 Velocipede, E. G. Latta, 34 F. 887; 144 U. S. 239.

323,372 Process of manufacturing incandescent lamp carbons, Stanley & Thompson, 95 F. 462.

323,918 Locking and unlocking mechanism for electric locks, Crockett & Allen, infringes 315186, 32 F. 833.

324,053 Button fastening staple, J. H. Vinton, 69 F. 592; 72 F. 520.

324,261 Ruffling or gathering attachment for sewing machines, A. Johnston, 28 F. 193; 125 F. 116.

324,453 Brick machine, J. J. Brewis, 76 F. 455.

324,503 See Reissue 10778.

324,734 Drive chain, J. J. Seldner, infringes Reissue 10444, 31 F. 149.

324,813 Trimming attachment for sewing machines, Clark & Murphy, 119 F. 367.

324,892 Electric railway motor, F J. Sprague, 84 F. 641; 88 F. 82; 91 F. 786; 95 F. 821; 97 F. 609; 102 F 761; 105 F. 959.

324,922 Sucker-rod for deep wells, J. M Davidson, 41 F. 220.

324,983 Combined corn planter and fertilizer distributor, J. Campbell, 74 F. 745.

325,132 Syringe, C. J. Tagliabue, 67 F. 551.

325,174 Toilet paper fixture, O. H. Hicks, 40 F. 578; 152 U. S. 425.

325,410 Package of toilet paper, O. H. Hicks, 40 F. 578; 152 U. S. 425.

325,425 Cash carrier, R. A. McCarty, 43 F. 249.

325,430 Button. A. G. Mead, 39 F. 606; 90 F. 104; 95 F. 168; 100 F. 984; 101 F. 1005.

325,506 Stem winding and setting watch, C. P. Corliss, 43 F. 434.

325 618 Store service apparatus, R. A McCarty, 43 F. 249; 106 F. 734.

325,688 Glove fastener, A. G. Mead, 39 F. 700; 60 F. 399; 150 U. S. 111.

325,699 Glove fastener, W. S. Richardson, 39 F. 700.

325,804 Stone crusher, F. A. Huntington, 91 F 661; 109 F. 269; 121 F. 136; 130 F. 558.

326,355 Overshoe clasp, J. J. Unbehend, 41 F. 520; 47 F. 452.

326,357 Overshoe clasp, J. J. Unbehend, 32 F 792; 38 F. 602; 41 F. 520; 47 F. 452.
326,401 Car coupling, F. A. Casey, 35 F. 78.
326,449 Check rower attachment for corn planter, L. J. Odell, 84 F. 349; 89 F. 329.
327,099 Bottle stopper, W. Painter, 47 F. 59.
327,209 Cement sink, C. Wesley, 58 F. 181.
327,289 Ventilator for railway cars, W. D. Mann, 34 F. 132.
327,406 Crimping device for glassware, J. Northwood, 100 F. 98.
327,626 Method of attaching stiffening to dress waists, E. K. Warren, 92 F. 990; 117 F. 860.
327,683 Cultivator and weed cutter, L. B. Hogue, 47 F. 463.
327,820 Door knob attachment, E. Parker, 32 F. 87.
327,878 Open circuit galvanic battery, C. W. Holtzer, 60 F. 748; 67 F. 907.
328,019 Metal cutting saw, T. Fowler, 66 F. 57; 75 F. 572; 88 F. 81; 96 F. 238.
328,080 Window frame screen, J. E. Stuart, 43 F. 792.
328,099 Device for converting motion in oil pumping apparatus, G. Allen, 89 F. 869; 102 F. 606.
328,452 Knotted wire for check row corn planters, J. C. Barlow, 102 F. 508; 121 F. 547.
328,614 Hydraulic elevator, G. H. Reynolds, 56 F. 718; 76 F. 767.
328,838 Chair, L. A. Chichester, 77 F. 886.
329,017 Steam car heater, E. D. Cody, 67 F. 121; 69 F. 1.
329,133 Cutting nippers, P. Broadbrooks, 88 F. 793.
329,284 Apparatus for making cores for watch crowns, A. C. Dalzell, 45 F. 697, 149 U. S. 315.
329,285 Apparatus for corrugating cores for watch crowns, A.C.Dalzell, 45 F. 697; 149 U. S. 315.
329,371 Roller spring tooth harrow, R. W. & A. W. Davis, 84 F. 673.
329,474 Cork nose guard for spectacles, E. B. Meyrowitz, 98 F. 437.
329,632 Benzo purpurine, C. Duisberg, 50 F. 73; 57 F. 524.
329,635 Method of working button holes, S. B. Ferris, 70 F. 714.
329,718 Car lamp, Clark & Briggs, 76 F. 1007.
329,805 Chair, W. Boscawen, 52 F. 295; 57 F. 489.
329,851 Pedals for velocipedes, A. H. Overman, 34 F. 887; 46 F.789; 53 F. 247; 58 F. 784.
329,875 Box, E. Andrews, 75 F. 271.
329,921 Wheel cultivator, E. P. Lynch, 41 F. 352.
330,061 Telephone switch board, C. E. Scribner, 85 F. 649; 142 F. 766.
330,067 Telephone switch board, J. A. Seely, 113 F. 659; 115 F. 809.
330,200 Apparatus for shaping and finishing candles, A. F. Baumer, 53 F. 373.

330,320 Fire engine harness, G. C. Hale, 38 F. 240.
330,372 Car wheel and axle box, S. A. Bemis, 75 F. 403; 80 F. 287; 98 F. 121.
330,576 Friction clutch for traction engine, C. M. Giddings, 102 F. 903; 106 F. 314; 113 F. 946.
330,747 Process of making gas, R. H. Smith, 42 F. 146.
330,849 Plug tobacco machine, T. Puetz, 31 F. 458.
330,850 Plug tobacco machine, T. Puetz, 31 F. 458.
330,851 Automatic stop for plug tobacco machine, T. Puetz, 31 F. 458.
330,915 Metallic ceiling, A. Northrop, 48 F. 455.
330,916 Metallic ceiling, A. Northrop, 48 F. 449; 51 F. 685; does not anticipate 388285, 81 F. 491.
330,976 See Reissue 10681.
331,001 Bicycle saddle, A. H. Overman, 54 F. 496.
331,118 Envelope, J. T. Dunham, 40 F. 668; 154 U. S. 103.
331,251 Apparatus for filling kegs with beer, C. Mussell, 124 F. 531.
331,252 Method of filling kegs with beer, C. Mussell, 124 F. 531.
331,259 Index for paper files, J. S Shannon, 73 F. 684.
331,280 Paper folding machine, L. C. Crowell, 65 F. 606; 70 F. 782; 87 F. 220; 87 F. 1007.
331,676 Cigar bunching machine, Borgfeldt & Schutz, 44 F. 190.
331,754 Static electric machine, P. Atkinson, 76 F. 368.
331,762 Carrier attachment to paper folding machine, R. T. Brown, 46 F. 72; infringes 343677, 57 F. 601; 58 F. 571.
331,813 Sweat pads for horse collars, A. Ortmayer, does not infringe 259700, 141 U. S. 419.
331,920 Road making machine, G. W. Taft, 45 F. 252; 164 U. S. 26.
332,318 Transmitter of motion for oil pumps, G. Allen, 64 F. 793.
332,444 Process of embossing plastic material, C. Schwartz, 88 F. 519.
332,762 Gravity switch back railway, L. M. A. Thompson, 99 F. 90.
332,890 Stencil sheet, D. Gestetner, does not anticipate 377706, 57 F. 834.
333,081 Apparatus for filling kegs with beer, C. Mussell, 124 F. 531.
333,102 Knitting machine, E. R. Branson, 105 F. 974; 108 F. 391.
333,344 Explosive compound, J. C. Schrader, 72 F. 925.
333,347 Dynamite, J. C. Schrader, 72 F. 925
333 373 Process of making wrought iron castings by adding aluminum, C. G. Wittenstrom, 89 F. 206; 89 F. 343; 122 F. 863; 135 F. 103
333,384 Fly book for anglers, M. Bray, 70 F. 1006.
333,474 Railroad switch, A. J. Moxham, 67 F. 940; 70 F. 244.

333 540 Device for swaging saw teeth, S. A. Parke, 61 F. 953.
333,750 Apparatus for distilling turpentine, Hanson & Smith, does not infringe Reissue 10689, 37 F. 348.
333,862 Carburetting attachment for gas fixtures, J. Kidd, 33 F.712; 35 F 588.
334,102 Rocking chair, W. I. Bunker, 46 F. 109.
334,125 Tool for dressing cement joints, M. MacDonald, 38 F. 328.
334,345 Rocking chair, W. I. Bunker, 46 F. 109.
334,579 Piston rod packing, O. J. Garlock, 46 F. 660.
334,782 Target, F. Kimble, 47 F. 725.
334,842 Anti-rattler for thill couplings, G. W. Blair, 44 F. 292, 66 F. 316; 80 F. 151.
335,033 Pressure regulator, N. C. Locke, 36 F. 311.
335,058 Electric furnace and method of operating same, A. H. Cowles, 83 F. 492; 102 F. 618.
335,080 Damper regulator, N. C. Locke, 36 F. 310.
335,328 Mining machine, G. D. Whitcomb, 47 F. 661.
335,499 Electric smelting furnace, Crocker & Bradley, 56 F. 488.
335,635 Shingle machine, J. N. Sears, 125 F. 491.
335,724 See Reissue 10981.
336,043 Coin controlled weighing machine, P. Everett, 50 F. 213.
336,242 Ornamental tile, J. G. Low 36 F. 904.
336,243 Medallion tile J. G. Low, 36 F. 904.
336,385 Filtering compound, C. E. Chamberland, 52 F. 146; 53 F. 98; 84 F. 812; 90 F. 815.
336,542 Felt boots, S. G. Alexander, 31 F. 286.
336,769 Shoe clasp, J. J. Unbehend, 41 F. 520; 47 F. 452.
337,006 Bending block for car door guide rod, D. C. & J. G. Mahon, 51 F. 681.
337,100 Tubular packing, W. White, Jr., 111 F. 190; 118 F. 827.
337,182 Paper fastener, G. W. McGill, 48 F. 229.
337,187 Trunk lock, F. W. Mix, 52 F. 980; 64 F. 789.
337,298 Storage battery, C. F. Brush, 41 F. 679; 52 F. 130.
337,299 Storage battery, C. F. Brush, 41 F. 679; 44 F. 602; 47 F. 48; 52 F. 130; 53 F. 804; 58 F. 387; 100 F. 975; 112 F. 538; 117 F. 314; 120 F. 672.
337,500 Lubricator, Kaczander & Ruddy, 47 F. 522; 49 F. 370.
337,650 Car coupling, C. O. & L. Barnes, 70 F. 622.
337,631 See Reissue 10717.
337,780 Car coupling, C. Mueller, 55 F. 66.
337,965 Paper bag machine, Lorenz & Honiss, 48 F. 562; 56 F. 224.
338,023 Electric railway motor, E. M. Bentley, 118 F. 154.
338,311 Automatic fan, Smith & Caldwell, 42 F. 58.
338,471 Process of manufacturing chymosin and pepsin, M. Blumenthal, 53 F. 105.
338 506 Bail for kettles, J. E. Gaitley, 92 F. 367.

338,602 Tape measure case, W. Keuffel, 74 F. 553.
339,064 Barrel making mechanism, G. W. Laraway, 82 F. 32.
339,307 Rail for dash board, R. W. Logan, 44 F. 757.
339,445 Pump, S. W. Martin 68 F. 213; 76 F. 816.
339,913 Car truck bolster, H. C. McCarthy, 43 F. 384; 160 U. S. 110.
339,998 Manhole cover for boiler, R. Munroe, 143 F. 986; 143 F.989, (C. C., W. D. Pa.); Monroe v. Riles & Conley, decided Oct. 15, 1895, not reported.
340,135 Tennis shoes, H. T. Marshall, 51 F. 755; 61 F. 211.
340,459 Satchel frame, W. Roemer, 81 F. 380.
340,769 Method of baling short-cut hay, E. M. Davenport, 120 F. 513.
340,785 Under guide for printing machine, W. K. Hodgman, 103 F. 658.
341,214 Graphophone, Bell & Tainter, 74 F. 789; 74 F. 1008; 87 F. 556; 87 F. 873; 90 F. 824; 92 F. 364; 92 F. 516; 98 F. 729; 105 F. 434.
341,288 Graphophone, S. Taintor, 74 F. 789; 74 F. 1008; 87 F. 556; 105 F. 434.
341,354 Process of making gas, R. H. Smith, 42 F. 146.
341,355 Preparation of cereals. Solter & Robbins, 46 F. 773.
341,380 Mail stamping apparatus, Hey & Laass, 57 F. 658; 61 F. 284; 141 F. 969.
341,559 Baling press, P. K. Dederick, 50 F. 96.
341,669 Sugar evaporator, S. M. Lillie, 43 F. 142.
341,790 Trimmer for sewing machines, J. Bigelow, 105 F. 970; 110 F. 210; 112 F. 535; 119 F. 371.
342,268 Box nailing machine, Doig & Smith, 87 F. 991; 89 F. 489; 91 F. 1001; 117 F. 305; 122 F. 460.
342,465 Sheet metal expansible elbow, D. A. Ritchie, 65 F. 222; 65 F. 224.
342,504 Magneto electric machine, R. Eickemeyer, 110 F. 963.
342,609 Machine for making wood pulp pail, M. L. Keyes, 83 F. 485; 87 F. 215.
342,852 Asphalt paving compound, A. Waldrath, 41 F. 883; 48 F. 300; 62 F. 281.
342,930 Furniture caster, S. H. Raymond. 84 F. 995.
342,941 Railway ticket, W. A. Thrall. 89 F. 718.
343,060 Map case, S. E. Nutting, 77 F. 835.
343,324 Grain separator, C. Kaspar, 69 F. 268.
343,369 Refrigerator, C. Haffcke, 46 F. 770; 50 F. 531.
343,677 Paper carrying mechanism for printing press, J. A. Stonemetz, 46 F. 72; 57 F. 601; 58 F. 571.
343,755 Machine for making and drying chalk drops, A. Buel, 66 F. 1010.
343,829 Folding trestle, J. T. Miller, 133 F. 541.

344,115 Safety razor, R. Kampfe, 105 F. 622; 109 F. 1064.
344,166 Machine for felting hat bodies, H. M. Chittenden, 41 F. 216.
344,430 Electric signal box, J. C. Wilson, 52 F. 468.
344,433 Chymosin and pepsin, M. Blumenthal, 43 F. 667; 53 F. 105.
344,435 Shoe-upper machine, Q. W. Booth, 52 F. 150.
344,462 Instrument for teaching piano playing, A. K. Virgil, 138 F. 897.
344,464 Instrument for teaching piano playing, A. K. Virgil, 138 F. 897.
344,667 Bail ear for pails, J. McDonnell, 67 F. 143.
344,786 Thill coupling, W. E. Murbarger, 46 F. 286.
344,793 Rail bender, A. A. Strom, 138 F. 909.
344,903 Hand stamp, B. B. Hill, 116 F. 927.
344,950 Disk seeder and cultivator, B. C. Dorsey, 69 F. 731.
345,037 Flexible button attachment for corsets, S. B. Ferris, 70 F. 714.
345,093 Car brake beam and shoes, G. Westinghouse, Jr., 99 F. 758.
345,186 Apparatus for treating pretzels and crackers, D. F. Stauffer, 50 F. 84.
345,229 Hay elevator and carrier, M. G. Grosscup, 96 F. 232.
345,463 Gas pipe joint, M. S. Verner 43 F. 582.
345,525 Linotype machine, O. Mergenthaler, 46 F. 114.
345,613 Furniture caster, Berkey & Fox, 84 F. 995; 113 F. 162.
345,843 Pipe covering, H. M. Hanmore, 110 F. 747.
345,901 Napthol black color compound, Hoffman & Weinberg, 69 F. 597; 77 F. 280; 78 F. 910.
345,953 Feeding mechanism for rolling mill, Brislin & Vinnac, 118 F. 579; 124 F. 213.
345,965 Hats and caps, J. C. Goebel, 55 F. 825; 55 F. 828; 64 F. 787.
346,563 Hydraulic lead press, J. Robertson, 142 F. 471.
346,899 Base board and wainscoting, G. F. Decker, 135 F. 112.
347,043 Rag engine for paper making, J. H. Horne, infringes 303374, 145 U. S. 302.
347,140 Art of electric welding, E. Thomson, 63 F. 120.
347,141 Apparatus for electric welding, E. Thomson, 63 F. 120.
347,342 Bucket for chain pump, S. A. Goss, 58 F. 196.
347,442 Combined bathing shoe and stocking, S. Rauh, 95 F. 151.
347,778 Satety brake for elevators, Eaton, Prince & Livesey, 125 F. 120; 130 F. 702.
347,961 Fountain pen, G. H. Sackett, 42 F. 847.
347,982 Grain drill, W. D. Arnett, 115 F. 886.
348,072 Composition for manifolding paper, J. T. & F. W. Underwood, 37 F. 796; 149 U. S. 224.
348,073 Reproducing surface for typewriting and manifolding, J. T. & F. W. Underwood, 37 F. 682; 37 F. 796; 149 U. S. 224.

348 150 Machine for weaving coiled wire fabric for bed bottoms, O. P. Briggs, 59 F. 702.

348.222 Art of printing on pyroxyline compounds, Lefferts & Hyatt, 37 F. 676.

348 289 Air brake hose, E. W. McKenna, 97 F. 645.

348,620 Manufacture of watch crowns, A. C. Dalzell, 45 F. 697.

348,969 Lamp wick raiser, L. Henkle, 36 F. 691.

349,039 Water tube boiler. H. C. Gondling. 33 F. 293.

349,134 Coal and ore car, L. J. Barr, 110 F. 972.

349,181 Feed water heater, W. J. Smith, does not infringe 304195, 43 F. 791.

349,430 See Reissue 10872.

349,503 Machine for breaking and cutting cane, T. F. Krajewski, 105 F. 514.

349,681 Metal wheelbarrow, W. Benjamin, 34 F. 755.

349,720 Steam boiler deflector, E. S. T. Kennedy, 50 F. 196; 56 F. 845.

350,727 Folding paper box, C. W. Elliott, 91 F. 905.

350,907 Machine for making heel stiffeners, W. J. Young, 36 F. 898.

351,064 Split wooden pulley, C. McNeal, 42 F. 54; 74 F. 241; 101 F. 584; 106 F. 935.

351,246 Wagon stake pocket, H. H. Bothe, 50 F. 536.

351,589 System of electric distribution, Gaulard & Gibbs, 35 F. 899. See Reissue 11836.

351,607 Process of making fish glue, W. N. Lepage, does not infringe Reissue 9296, 30 F. 370.

352,157 Dry toilet closet, I. D. Smead, 44 F. 614.

352,286 Rail brace, C. Alkins, 75 F. 279; 83 F. 170.

352,317 Telegraph sounder, C. D. Haskins, infringes 270767, 139 U. S. 601.

352,548 Machine belting, J. Lee, 39 F. 796.

352,748 Feeding mechanism for rolling mill, Hanley & Richey, 118 F. 579; 124 F. 213.

352,869 Type casting machine, Hochstedt, Wenzel & Heinebach, 91 F. 418; 95 F. 145.

353,162 Fountain pen, G. H. Sackett, 42 F. 847.

353,497 Wheel plow, J. F. Packer, 41 F. 387.

353,723 Force and drain faucet, A. J. & E. H. Weatherhead, 72 F. 505.

353,783 Incandescent lamp, T. A. Edison. limited by foreign patent, (C. C., D. Mass.) Edison Electric Light Co. v. Fred Miller, bill dismissed by consent May 8, 1900, not reported.

353,790 Woven fabric. D. B. Kerr, 55 F. 658; 58 F. 395.

353,913 Sweat pad for horse collars, S. Barstow, 104 F. 299.

354.043 Rocking chair spring, M. D. & T. A. Connolly, 46 F. 109; 58 F. 217; 68 F. 196; 77 F. 420.

354,060 Mold for casting type, Hochstedt, Wenzel & Heinebach, 91 F. 418; 95 F. 145.
354,242 Friction clutch, E. Solomon, 84 F. 195.
354,281 Dyeing apparatus, L. Weldon, 122 F. 640; 128 F. 724.
354,285 Tank for water closet, P. White, 63 F. 841.
354,499 Sewing machine, E. Woodward, 93 F. 669; 104 F. 556.
354,577 Ruffling attachment for sewing machines, W. R. Parsons, 125 F. 386; 134 F. 394.
354,717 Cultivator, P. P. Mast, 53 F. 120.
354,793 Electric railway motors, W. H. Knight, 117 F. 613.
354,929 Station indicator, W. H. Pierce, 121 F. 742.
354,935 Type casting machine, G. Rettig, 91 F. 418; 95 F. 145.
355,144 Apparatus for capping watch crown cores, A. C. Dalzell, 45 F. 697.
355,251 Hydraulic dredging apparatus, A. B. Bowers, 63 F. 572; 80 F. 119; 80 F. 121; 83 F. 950; 87 F. 293.

1887

355,462 Grain drill, W. W. & F. M. Mullen, 75 F. 407; 82 F. 636
355,568 Baker's oven, A. T. Simpkins, 56 F. 501.
355,716 Press grain drill, J. W. Rhodes, 64 F. 218.
356,217 Machine for trussing tubs, F. W. Ulrich, infringes 294764, 43 F. 892; does not infringe 294764, 80 F. 293.
356,322 Wire fence machine, A. L. Kitselman, 108 F. 632; 189 U.S. 8
356,394 Candy manufacture, G. D. Moffat, 44 F. 287.
356,690 Mechanical musical instrument, G. B. Kelly, 134 F. 872.
356,963 Electric circuit closing apparatus, E. E. Ries, 136 F. 850.
357,067 Wire fence machine, T. M. Connor, 108 F. 632; 189 U. S. 8.
357,068 Undershirt, T. Dalby, 64 F. 376.
357,127 Ladies' drawers, W. F. Kneip, 49 F. 571.
357,159 Water meter, J. A. Tilden, does not infringe Reissue 10806, 149 U. S. 48.
357,162 Cable railways, C. Wise, 33 F. 278.
357,237 Separable button, M. G. Shipman, 40 F. 460.
357,538 Spring jack switch for telephone switch board, C. E. Scribner, 135 F. 80.
357,833 See Reissue 11001.
357,851 Cash carrier, E. P. Osgood, 75 F. 27; 83 F. 201; 88 F. 286; 100 F. 299; 103 F. 489; 105 F. 978; 105 F. 985; 107 F. 716; 119 F. 614.
357,874 Water heater for stoves, R. J. Stirratt, 60 F. 607; 61 F. 980;
357,931 Lubricator, L. Kaczander, 49 F. 370.
357,933 Motor for mechanical musical instrument, G. B. Kelly, 134 F. 872.

357,987 Automatic fire extinguisher, W. S. Gray, 32 F. 80; 35 F. 513.
357,993 Toilet paper holder, O. H. Hicks, 40 F. 578; 152 U. S. 425.
358,147 Waste valve, J. Demarest, does not infringe Reissue 6739, 46 F. 77; 51 F. 81; 53 F. 819.
358,284 Gasoline stove, J. A. Marsh, 51 F. 203.
358,483 Gymnasium walking track, R. J. Roberts, 47 F. 899; 48 F. 239.
358,604 Furnace protecting lining, Gordon, Strobel & Beisel, 126 F. 538.
358,829 Steam engine governor, F. H. Ball, 31 F. 901.
358,848 Machine for making sensitive photographic films, Eastman & Walker, 77 F. 412; 84 F. 458.
358,898 Hay baling press, E. C. Sooy, 81 F. 726.
359,354 Car seat, H. S. Hale, 129 F. 598.
359,441 Shoulder pad, E. Goldman, 113 F. 629.
359,551 Hydraulic elevator controller, N. C. Bassett, anticipates 453-955, 119 F. 928.
359,588 Grinding mill, J. F. Winchell, 44 F. 595; 49 F. 641.
359,590 Wooden pipe, C. P. Allen, 117 F. 140.
359,614 Glove fastener, E. J. Kraetzer, does not infringe 325688, 150 U. S. 111.
359,615 Glove fastener, E. J. Kraetzer, does not infringe 325688, 150 U. S. 111.
359,636 Railway track scale, Scharle & Himmes, 125 F. 4.
359,686 Police signal system, B. J. Noyes, 107 F. 284.
359,687 Municipal signal system, B. J. Noyes, 52 F. 464; 61 F. 948; 77 F. 452; 97 F. 810; 99 F. 569; 107 F. 284.
359,688 Municipal signal system, B. J. Noyes, 52 F. 464; 61 F. 948; 77 F. 452; 97 F. 810; 99 F. 569; 107 F. 284.
359,875 Store service apparatus, D. Lippy, infringes 303006, 45 F. 245.
359,972 Machine for printing on boards, Hooper & Hollingsworth, 84 F. 339.
360,036 Method and apparatus for rolling rails, A. J. Moxham, 50 F. 90; 56 F. 43.
360,070 Air brake mechanism, G. Westinghouse, Jr., does not anticipate 376837, 59 F. 581; 65 F. 99; 66 F. 997; 69 F. 715; 70 F. 816; 77 F. 616; 103 F. 491; 121 F. 558; 170 U. S. 537.
360,798 Breech loading ordnance, Driggs & Schroeder, 99 F. 996; 114 F. 936.
361,009 Hollow metal brake beam, P. Hein, 99 F. 758; 106 F. 693.
361,438 Sheet metal ceiling, F. Mesker, 42 F. 329.
361,934 See Reissue 11607.
361,994 Circular loom, A. De Laski, 40 F. 168.

362,041 Cotton conveyor, D. A. Sailor, does not infringe 308790, 49 F. 61.
362,204 Brick machine, C. Chambers, Jr., 92 F. 630.
362,211 Photographic shutter, G. F. Green, 99 F. 95; 108 F. 396.
362,568 See Reissue 11009.
362,679 Road working machine, G. W. Taft, 44 F. 78.
362,870 Wind mill, G. M. Beard, 57 F. 219.
362,938 Apparatus for cooling saline solutions, W. B. Cogswell, 90 F. 818.
363,012 Hay baling press, E. C. Sooy, 81 F. 726.
363,186 Alternating current electric motor, E. Thompson, 130 F. 902; 137 F. 917.
363,425 Spindle support for spinning machines, A. R. Sherman, 133 F. 238; 143 F. 976.
363,528 Circular knitting machine, W. H. Mayo, 121 F. 110; 133 F. 527.
363,553 Hose coupling for railway cars, J. H. Sewell, 71 F. 697.
363,566 Tank water closet, P. White, 63 F. 841.
363,695 Stair pad, T. S. Sperry. 74 F. 869.
363,936 Card gilding machine, C. A. Wright, 44 F. 353.
363,971 Dry toilet closet, I. D. Smead, 44 F. 614.
364,081 Pneumatic drilling tool, A. J. Bates, 69 F. 331; 71 F. 523; 77 F. 988; 100 F. 467; 106 F. 229; 123 F. 891.
364,158 Dredging apparatus, A. B. Bowers, 91 F. 381.
364,161 Paper box machine, G. H. Cushman, 90 F. 727; 95 F. 664.
364,217 Mold for boot heels, G. R. Coburn. 115 F. 155; 132 F. 973.
364,219 Coat and method of making same, B. G. Corser, 93 F. 809.
364,571 Dredging apparatus, A. B. Bowers, 91 F. 381.
364,603 Bean harvester, P. Rulifson, 95 F. 825.
364,875 Folding bed, L. W. Welch, 37 F. 693.
364,996 Chair for street car rails, E. B. Entwisle, 59 F. 242.
365,211 Hay baling press, A. Wickey, does not interfere with 382-144, 56 F. 714.
365,240 Trolley track, L. Coburn, 91 F. 260; 97 F. 333.
365,316 Can cap soldering machine, E. Norton, 137 F. 86; 142 F. 141.
365,723 Barbed wire machine, A. J. Bates, 71 F. 302; 139 F. 578; 143 F. 116.
365,754 Lubricator for car axles, Lyon & Munro, 155 U. S. 621.
365,789 Hydrocarbon burner, J. H. Bullard, does not anticipate 397-336, 54 F. 386.
365,819 Welding ends of tubes, H. Jordan, 42 F. 530; 43 F. 670.
365,829 Making hollow handles, W. W. Lee, 42 F. 531.
366,362 Device for cooling alternating current transformers, G. Westinghouse, Jr., 112 F. 417; 117 F. 495; 121 F. 560; 129 F. 604; 130 F. 550.

366,482 Apparatus for making tin cans, W. Hipperling, 67 F. 236; 83 F. 512.
366,566 Spring bed frame, M. Burton, 117 F. 502.
366,621 Overalls, B. G. Corser, 93 F. 805.
367,252 Elevated gravity and cable railroad, L. M. A. Thompson, 99 F. 90; 119 F. 359; 127 F. 698.
367,267 Ice planer, J. N. Briggs, 54 F. 376; 60 F. 87; 87 F. 479; 93 F. 972.
367,286 Toboggan slide, B. B. Floyd, 47 F. 219.
367,447 Typewriter machine, E & D. J. Rowlands, 109 F. 330.
367,484 Method of and machine for compressing shank stiffeners, J. M. Watson, 47 F. 117; 51 F 757; 53 F. 31.
367 530 Corn cultivator, King & Morgan, 56 F. 841.
367,694 Snow plow, P. B. Brazel, 89 F. 584.
367,725 Steam pipe union, E. P. Paynter, Jr., 63 F. 122; 64 F. 398.
367,732 Fertilizer, J. Van Ruymbeke, 100 F. 451; 104 F. 87.
367,746 Girder slot rail crossing, E. B. Entwistle, 62 F. 156.
367,828 Box keel for ships, J McIntyre, anticipates 393713, 113 F. 952
368,051 Hollow handled cutlery, H A. Brognard, 50 F. 538.
368,108 Leather cutting machine, H Parsons, 92 F. 1005; 100 F. 452; 100 F. 455.
368,249 Incubator, G. H. Stahl. 52 F. 648; 62 F. 920; 64 F. 121.
368,275 Apparatus for making sheet metal chains, R. A. Bruel, does not infringe 202528, 46 F. 393.
368,490 Method of making wooden pulleys, G. Philion, 101 F. 584; 106 F. 935.
368,770 Stove, W. J. Keep. 81 F. 376; 86 F. 463.
368,813 See Reissue 10942.
368,898 Clay disintegrator, C. & A. Potts, 44 F. 680; 77 F. 454; 97 F. 78; 126 F. 475; 155 U. S. 597.
369,120 Portable drilling machine, J Moffet, 110 F. 206; 122 F. 69; 123 F. 899; 131 F. 257.
369,163 Disk harrow, G. M. Clark, 80 F. 534; does not anticipate 415113, 84 F. 336.
369,195 See Reissue 10941.
369,280 Filament for incandescent electric lamps, T. A. Edison, 35 F. 234.
369,295 Adjustable dentist's chair, J. B. Morrison, 56 F. 262.
369,451 Sliding door hanger, W. O. Kasson, anticipates 455695, 80 F. 915.
369,554 Machine for attaching heel plates, F H. Richards, does not infringe 296624, 53 F. 281.
369,818 Photographic camera, W. Schmid, 37 F. 345.
369 843 Flushing tank for water closet, J. & G. Douglas, 50 F. 420.
369,881 Band saw mill, D. W. C. Prescott, 102 F. 501.
369,979 Bustle, L. S. Bortree, 43 F. 137.

370,110 Process for coating photographic paper, Eastman & Walker, 77 F. 412; 84 F. 458.
370,111 Process for coating photographic paper, Eastman & Walker, 77 F. 412; 84 F. 458.
370,437 Wall coping, P. B. Wight, 47 F. 313.
370,614 Furniture nails, T. F. N. Fitch, 55 F. 820; 61 F. 650; 67 F. 913; 71 F. 588; 74 F. 864.
370,950 Process for desulpharizing petroleum, D. M. Kennedy, 69 F. 715.
371,090 Road cart, H. J. Miller, 62 F. 923; 73 F. 682.
371,107 Waste trap, S. E. Thomas, infringes 286746, 41 F. 343.
371,431 Water closet valve, W S. Cooper, 135 F. 101; 137 F. 431.
371,448 Spring seat, H. S. Hale, 124 F. 514.
371,496 Adding machine, D. E. Felt, 129 F. 386.
371.524 Induction coil, E. Smith, 34 F. 783.
371,574 Machine for moulding wall coping, J Francy, 47 F. 313.
371,599 Cable car grip, H. M. Lane, 40 F. 760.
371,839 Flying target trap, C. C. Hebbard, 97 F. 44; 102 F. 354.
372,062 Metallic buckle and button hole, B. G. Corser, 93 F. 807.
372,239 Loom shuttle, C. G. Root, 47 F. 309.
372,305 Furnace for burning wet and offensive matter, A. Engle, 73 F. 484.
372,375 Adjustable bale tie, I. A. Kilmer, 62 F. 119; 67 F. 1017; 74 F. 561.
372,698 Brick mold sanding machine, A. C., S. & A. H. Newton, 97 F. 614.
372.786 Gramophone, E. Berliner, does not infringe 341214, 92 F. 364.
372,956 Hydraulic excavator, A B Bowers, 91 F. 381; 105 F. 525; 132 F. 39.
373,034 Electric motor starting device, H. E. Walter, does not anticipate 418678, 124 F. 222.
373,098 Car buffer, H. H. Sessions, 38 F. 417; 44 F. 764.
373,107 Lock, W. H. Taylor, 97 F. 106.
373,223 Toy bank, E. J. Colby, 63 F 462; 64 F. 594.
373,295 Artificial pavement, J. W. McKnight, 64 F. 115.
373,359 Railway cattle guard, J. T Gilbert, 49 F. 158.
373,639 Electric motor car truck, G. M. & J. A. Brill, 80 F. 909.
373,746 Making smooth surface on stone, J. S. MacCoy, 69 F. 331.
373,988 Dress form, W. H. Knapp, 54 F. 701.
373,989 Dress form, W. H. Knapp, does not infringe 233239, 48 F. 113; 55 F. 79.
374,307 Combination garment, W. F. Kneip, 49 F 571.
374,587 Metallic box strap, C. H. Dana, 108 F. 231
374,888 Knitted fabric, L. Bywater, 78 F. 811; 84 F. 649; 95 F. 465; 96 F. 435; 101 F. 462; 102 F. 509; 117 F. 845
374.936 Wax thread sewing machine, D. H. Campbell, 83 F. 208; 86 F. 141.

375,102 Automatic weighing scale, W. R. Smith, 145 F, 951.
375.579 Talking machine, C. S. Tainter, 105 F. 434.
375.660 Brick machine, A. D. Thomas, 76 F. 455.

1888

376,009 Punching machine, A. H. Raynal, 97 F. 807; 101 F. 265; 108 F. 963.
376,053 Webb printing machine, J. H. Stonemetz, 64 F. 782; 69 F. 250; 70 F. 339; 77 F. 976; 79 F. 653; 89 F. 539; 86 F. 315; 101 F. 282.
376,399 Machine for stuffing mattresses, E N Stephenson, 82 F.639; 139 F. 11.
376,400 Rasp cutting machine, J. & G. Stokes, 56 F. 297; 96 F.104; 101 F. 266.
376,804 Can crimper and capper, M. Jensen, 49 F. 859; 64 F. 599; 81 F 494; 119 F. 599; 130 F. 129.
376.837 Air brake mechanism, G. Westinghouse, Jr , 59 F. 581; 63 F. 962; 65 F. 99; 69 F. 715; 70 F. 619; 70 F. 816; 77 F. 301; 77 F. 616; 86 F. 132; 88 F. 258; 115 F. 645; 131 F. 607; 140 F. 545.
376,926 Sheet metal ceiling, C. Thuener, infringes 361438, 42 F. 329.
377,043 Wire bail bottle stopper, F. P. Morhous, 72 F. 271.
377,151 Machine for napping cloth, H. N. Grosselin, 75 F. 405; 82 F. 449; 84 F. 1017; 91 F. 792.
377,353 Device for scraping hogs, Cunning & Lowry, 108 F. 71.
377,376 Machine for coupling chain links, N. B. Fassett, 58 F. 360; 62 F. 404.
377,630 Reciprocating saw mill, H. McEvilla, 43 F. 139.
377,706 Wax stencil sheet, J. Broderick, 57 F. 834; 74 F. 799; 75 F. 388; 80 F. 519; 88 F. 264; 89 F. 95; anticipates 562590, 105 F. 629; 105 F. 1006; anticipates 562590, 108 F. 961; 117 F. 154.
377,996 Dynamo, R. Eickemeyer, 113 F. 756; 115 F. 497.
378.080 Garment stay, E C. Bowling, 72 F. 277; 78 F. 926.
378.144 Churn, S. D. Palmer, 54 F. 509.
378,223 Cork sleeve pen holder, L. L. Tower, 90 F 662; 94 F. 361; 129 F. 918.
378,263 Satchel frame, W. Roemer, 56 F. 294; 81 F. 380.
378.379 Beer filtering process, H. Stockheim, 41 F 132; 53 F. 485; 98 F. 300; 103 F. 303; 107 F. 949.
378,282 Trunnion bearings for ordnance, R. T. Brankston, 15 App. D. C. 223.
378,412 Method of forming hollow spheroidal bodies from sheet metal tubes, J. Burkhardt, 72 F. 269; 79 F. 801.

378,457 Adjustable form for setting and building carriage tops, C. C. Oakes, 62 F. 269; 66 F. 1007.
378,465 Under garment, J. A. Schriven, 124 F. 894; 134 F 366
378,520 Maltha coated water proof paper, Pearce & Beardsley, 43 F. 304; 65 F. 509; 68 F. 483.
378,620 Satchel frame, W. Roemer, 56 F. 294.
378,843 Vacuum evaporator, S. M. Lillie, 43 F. 142.
378 861 Box hinge, B. S. Atwood, 47 F. 219; 48 F. 910.
378,934 Machine for pointing skewers, L. B. McNutt, 91 F. 784.
378,982 Coin controlled vending machine, M. Sielaff, 77 F. 978.
379,253 Slate picker for separating slate from coal, S Thomas, 122 F. 877.
379,334 Book binding, M. Ryan, 86 F. 642; 97 F. 964.
379.534 Toy registering savings bank, E. Headley, 107 F. 134; 108 F. 870; 123 F. 897.
379,550 Wheeled road scraper, S. F. Welch, 77 F. 194; 86 E. 646.
379,644 Interfering device for horses, M. Haughey, 48 F. 382; 48 F. 679; 151 U. S. 282.
379.712 Car axle box lid, G. W. Morris, 78 F. 129; 81 F. 407.
379,805 Water meter, L. H. Nash, 65 F. 427; 75 F. 405.
379,973 Overflow for wash basins, C. H. Moore, 126 F. 191; 138 F. 402.
380.068 Wheeled road scraper, S. F. Welch, 77 F. 194; 86 F. 646.
380,296 Leather trimming machine, S. H. Randall, 104 F. 355.
380,346 Shingle sawing machine, W. J. Perkins, 51 F. 286; 80 F. 528.
380,380 Process of making safety pins, B. A. Ballou, 88 F. 786; 110 F. 969.
380,696 Advertising rack for street cars, I. H. Randall, 82 F. 732; 88 F. 795; 122 F. 803; 142 F. 974.
381,166 Weather strip, J. Poyton, 58 F. 371.
381,305 See Reissue 10945.
381,527 Process of making compound ingots for seamless plated wire for jeweler's use, L. L. Burdon, 128 F. 927.
381,716 Machine for punching cards from printed sheets, S. J. Murray, 70 F. 50.
381,968 Electro magnetic motor, N. Tesla, 103 F. 951; 110 F. 753; 115 F. 733; 129 F 105.
382,032 Air brake, T. S. E. Dixon, 87 F. 882; 96 F. 991.
382,105 Method of coloring glassware. H. E. Mueller, 95 F. 155.
382,144 Hay baling press, P. K. Dederick, 56 F. 714.
382,157 Carpet fabric, H. Hardwick, 71 F. 887.
382,202 Grinding mill, J S Woodcock, 46 F. 629.
382.279 Electro magnetic motor, N. Tesla, 103 F. 951; 110 F. 753; 115 F. 733; 129 F. 105.
382,280 Method of transmitting power electrically, N. Tesla, 103 F. 951; 110 F. 753; 115 F. 733; 129 F. 105.

382 288 Hair clipping machine, L. S. Lee, 115 F. 637; 119 F. 358.
382,322 Ammoniacal detergent compound, C. C. Parsons, 58 F. 787.
382,323 Ammoniacal detergent compound, C. C. Parsons, 58 F. 787.
382,342 Button fastener, C. E. Vreeland, does not infringe 319997, 48 F. 310.
382,418 Phonogram blank, T. A. Edison, 116 F. 863; 125 F. 922.
382,567 Can heading machine, J. Solter, 45 F. 637.
382,689 Apparatus for sinking wells, M. T. Chapman, 98 F.992; 121 F. 76.
383,170 Iron building construction, L. S. Buffington, 65 F. 92; 65 F. 804
383 258 Machine for removing hairs from furskins, J. W. Sutton, 95 F 474; 98 F. 297; 108 F. 82; 113 F. 588; 113 F.698; 113 F. 699; 115 F. 498; 115 F. 507; 115 F. 510; 115 F.524; 117 F. 623; 120 E. 672, 118 F. 838; 123 F 479; 123 F. 869; 143 F. 508; 198 U. S. 399.
383,543 Book index, R. M Rigby, 48 F. 227.
383,829 Ratchet mechanism for lawn mowers, J. V. Rowlett, 76 F. 827.
383,914 Machine for shaving hides, Rood & Vaughan, 92 F. 371; 99 F. 990.
383,917 Towing machine, Shaw & Speigle, 112 F. 432; 118 F. 36.
383,999 Rasp, P. S. Stokes, 56 F. 297; 96 F. 104.
384,523 Toy coin receptacle and register, Headley & Horton, 107 F. 134; 108 F. 870; 123 F. 897.
384,893 Machine for beating out shoe soles, J. C. Cutcheon, 52 F. 147; 60 F. 80; 61 F 289; 70 F. 982; 72 F. 920; 92 F. 391; 99 F. 280; 102 E. 899.
385,005 Weighing and price scale, J. E. Pitrat, 88 F. 788; 101 F. 837; 126 F. 639
385,022 Apparatus for electric welding, E. Thomson, 63 F. 120.
385,070 Feather duster, G. M. Richmond, 43 F. 381.
385,233 Interior door frame, W. J. Boda, 82 F. 445; 98 F. 120; 102 F. 692.
385,648 Bank account book, W. Thomson 53 F. 250 See Reissue 10977.
385,769 Feed water heater, J. Miller, 89 F. 88.
385,970 Water meter, J. A. Tilden, does not infringe Reissue 10806, 149 U. S. 48.
386,121 Atomizer, C. Gauthier, 67 F. 597; 90 F. 483.
386,360 Hay baling press, E. C. Sooy, 81 F. 726.
386,458 Apparatus for making water gas, V. L. Ellbert, 50 F. 205.
386,674 Paper file, A J. Wells, 46 F. 572.
386,675 Paper file, A. J. Wells, 46 F. 572.
386,771 Portable forge, G. Cumming, 144 F. 395.
386,941 Casting lead traps, S. E. Thomas, infringes 371107, 41 F. 346.

386,974 Phonograph, T. A. Edison, 108 F. 630; 116 F. 863.
387,048 Bridle bit, H. W. Campbell, 78 F. 127.
387,071 Metal snatch block, H. V. Hartz, 95 F. 681.
387,285 Indicator for weighing apparatus, H. Fairbanks, 136 F. 891.
387,290 Cloth pressing machine, D. Gessner, 63 F. 954.
387,292 Cloth pressing machine, D. Gessner, 63 F. 954; 63 F 961.
387 297 Cloth pressing machine, D. Gessner, 63 F. 954; 63 F. 961.
387,308 Artificial pavement, J. W. McKnight, 64 F. 115.
387,318 Machine for hulling green peas, R. P. Scott, 106 F. 191; 115 F. 625.
387,359 Safety razor, F., R. & O. Kampfe, 105 F. 624.
387,426 Oil can, G. W. Lane, 43 F. 890.
387,831 Disk water meter, J. Thomson, 106 F 519.
387,947 Manufacture of celluloid sheets, F. Curtis, 52 F. 740.
388,285 Metallic ceiling, W. T. Kinnear, 81 F. 491; 87 F. 333.
388,306 Clip for spring tooth harrow, Reed & Clark, 54 F. 493.
388,361 Relief type production, J. W. Hoke, 47 F. 506; 53 F. 817.
388,366 Mail stamping apparatus, Hey & Laass, 57 F. 658; 61 F. 284; 141 F. 969.
388,589 Process of ornamenting card board, C. Schwartz, 88 F. 519.
388,830 Last, G. H. Clark, 133 F. 394.
388,840 Wire rope clamp, O. Crosby, 143 F. 322.
389,340 Mantel, R. B Thompson, 42 F. 156.
389,435 Machine for making matches, E. B. Beecher, 80 F. 117; 127 F. 341; 129 F. 602.
389,485 Device for holding and dipping pills, J. B. Russell, 85 F. 218.
389,510 Car coupler, J. A. Hinson, 86 F. 128.
389,778 Interchangeable ring, Thie & Levy, 63 F. 992.
389,817 Portable boat, C. W. King, 146 F. 133.
389,826 Machine for finishing blind slats, A. F. Tyler, 81 F. 621.
389,901 Tool for trimming wall paper, C. T. Ridgeley, 103 F. 875.
389,993 Dress stay, E. K. Warren, 92 F. 990.
390,087 Carbon copying record book, H. Loewenbach, 92 F. 661.
390,177 Catheter, J. E. Lee, 105 F. 627.
390,314 Disinfecting sulphur candle, C. H. Shaw, 76 F. 456.
390,698 Windmill, W. D. Nichols, 105 F. 781.
390,821 Waste trap, S. E. Thomas, 41 F. 347.
390,921 Carbon commutator brush, C. J. Van Depoele, 110 F. 654; 117 F. 249.
391,340 Band fastening, J. M. Scott, 115 F. 157.
391,439 Instrument for teaching piano playing, A. K. Virgil, 138 F. 897.
391,512 Electric switch, W. B. Cleveland, 110 F. 215.
391,875 Medical compound, E. A. Baumann, 53 F. 247.

392,038 Case for exhibiting decorative art, H. W. Kraatz, 79 F. 322; 85 F. 437.
392,262 Paper slitting machine, W. C. Edwards, 45 F. 364.
392,365 Mill for rolling wire rods, H. Roberts, 69 F. 624; 71 F.706.
392,387 Electrical measuring apparatus, E. Weston, 128 F. 939; 130 F. 152; 131 F. 280; 131 F. 494; 145 F. 534.
392,490 Commutator bar for dynamo, C. E. Billings, 98 F. 732.
392,698 Coin controlled electrical weighing scale, Smith & Washburn, 111 F. 401.
392,735 Drying rack for printers, H. T. Koerner, 143 F. 544.
392,961 Valve, C. Lynch, 115 F. 511.
392,973 Bicycle, W. E. Smith, 139 F. 49.
393,266 Electric motor and dynamo, A. L. Riker, 54 F. 519.
393,278 Trolley switches or crossings, C. J. Van Depoele, 130 F.542; limits 424695, 143 F. 534.
393,323 Controlling switch for electric car motor, G. H. Condict, 87 F. 733; 89 F. 204; 89 F. 205; 91 F. 142; 108 F.244; 110 F. 647; 110 F. 986
393,506 Blank book, J. W. Horne, 86 F. 146.
393,507 Blank book, J. W. Horne, 86 F. 146.
393,538 Paper machine, C. H. Campbell, 58 F. 212.
393,713 Ship's keelson, J. McIntyre, 113 F. 952.
393,784 Air brake, H. S. Park, 59 F. 581; 63 F. 962; 65 F. 99; 77 F. 616; 85 F. 786.
393,866 Machine for felting hats, J. S. Taylor, 128 F. 741.
393,940 Hay sling, J. Toney, 96 F. 232.
393,941 Pulley, J. Toney, 96 F. 232; 141 F. 975.
393,970 See Reissue 11062.
394,039 System of suspending trolley wires and insulating turn-buckle, C. J. Van Depoele, 129 F. 378.
394,113 Railroad spike, W. Goldie, 64 F. 237; 81 F. 173; 84 F. 972.
394,121 Roll paper cutter, E. L. Knopp, 44 F. 609.
394,419 Apparatus for charging and drawing furnaces, S. T. Wellman, 106 F. 221.
394,623 Hay baling press, E. C. Sooy, 81 F. 726.
394,957 Folding bed lounge, N. Clune, 77 F. 295; 82 F. 227.
394,999 Brush and brush holder for dynamo, E. W. Rice, Jr., 104 F. 816.

1889

395,077 Warp knitting machine, H. B. Payne, 80 F. 520; 83 F. 508.
395,584 Conduit for electric cables, E. H. Phipps, 73 F. 491.
395,668 Last, G. E. Smith, Jan. 1, 1889, not infringed (C. C., D. Mass.) 96 F. 248; Cl. 2 void (C. C. A. 1st Cir.) 105 F. 523.
395,714 Hay elevator track, V. L. & J. Ney, Jan 8, 1889, held not to infringe 287772 (C. C A. 6th Cir.) 69 F. 405.

395,788 Can making machine, E. Norton, 83 F. 512.

395,795 Can forming and soldering machine, E. Norton, Jan. 8,1889, not infringed (C. C. A. 9th Cir.) 67 F. 236; 83 F. 512.

395,871 Brick machine, J. J. Brewis, Jan. 8, 1889 (C. C., N. D. Ill.) 76 F. 455.

396,209 Engine frame, A. L. Ide, Jan. 15, 1889, void (C. C. A. 7th Cir.) 89 F. 491.

396,310 Electric railway trolley, C. J. Van Depoele, Jan. 15, 1889, held to not anticipate 412155 (C. C., D. N. J.) 96 F. 563.

396,313 Trolley crossing and switch, C.J. Van Depoele, Jan.15,1889, valid, infringed (C. C , D. Mass.) 130 F. 542.

396,372 Barrel stand, C. C. Schreiber, Jan. 15, 1889, claim 6 void (C. C., S. D. Ohio, W. D.) 65 F. 220; void (C. C. A. 6th Cir.) 72 F. 671.

396,407 Electric wire conduit, J. Lynch, Jan. 29, 1889, void (C.C.A. 8th Cir.) 61 F. 845.

397,110 Fence, J. B. Cleveland, Feb. 5, 1889, void (C. C., D. Ind.) 42 F. 911.

397,119 Cuff fastener, H. C. Frank, Feb. 5, 1889, not infringed (C. C., D. N. J.) 65 F. 521; (C. C. A. 3rd Cir.) 67 F. 596.

397,140 Warp knitting machine, Payne & Campion, Feb. 5, 1889, infringed (C. C., S. D. N. Y.) 80 F. 520.

397,254 Rasp cutting machine, P. S. Stokes, Feb. 5, 1889, not infringed (C. C., D. N. J.) 96 F. 104; (C. C. A. 3rd Cir.) 101 F. 266.

397,259 Naphthaline paper, A. Tsheppe, Feb. 5, 1889, infringed (C. C., S. D. N. Y.) 42 F. 59.

397,280 Phonograph recorder and reproducer, T. A. Edison, Feb. 5, 1889, infringed (C. C., E. D. N. Y.) 117 F. 149.

397,293 Lubricator for steam engines, A. L. Ide, Feb. 5, 1889, valid, infringed (C. C. A. 8th Cir.) 115 F. 137.

397,296 Compound to restrain the setting of plaster, G.R King, Feb. 5, 1889, valid, infringed (C. C., S. D. N. Y.) 90 F. 500.

397,336 Apparatus for burning hydrocarbons, J. H. Bullard, Feb. 5, 1889, valid, infringed (C. C., D N. J.) 54 F. 386.

397,451 Electric railway trolley, C J. Van Depoele, Feb. 5, 1889, held to not anticipate 424695 (C. C. A. 6th Cir.) 80 F. 713; held to not anticipate 412155 (C. C., D. N. J.) 96 F. 563.

397,766 Folding bed, L W. Welch, Feb. 12, 1889, not infringed (C. C., D. Mass.) 51 F. 675; valid, infringed (C. C. A. 1st Cir.) 58 F 583.

397,860 Machine for molding tubes or cylinders, H.G.Keasbey, Feb. 12, 1889, void (C. C., E D. Pa.) 137 F. 602; valid, claim 1 infringed (C. C. A 3rd Cir.) 143 F. 490; valid and infringed (C C., S. D. N. Y.) 14 F. 202.

398,158 Velocipede, T. B. Jeffery, Feb. 19, 1889, valid, infringed (C. C., S. D. N. Y.) 90 F. 279.

398,345 Cigar cutter, F. A. Phillippi, Feb. 19, 1889, void or not infringed (C. C. A. 3rd Cir.) 102 F. 689.

398,583 Steam engine lubricator, W. H. Craig, Feb 26, 1889, void (C. C., E. D. Mich.) 72 F. 173; not infringed (C. C. A. 6th Cir.) 81 F. 870

398,625 Cash indicator and recorder, W. Koch, Feb. 26, 1889, not infringed (C. C., D. N. J.) 143 F. 342.

398,898 Cash indicator and register, C. E. Lord, Mar. 5, 1889, held not entitled to priority over 499294 (C. C., D. N. J.) 60 F. 603.

399,029 Art of decorating pottery ware, L. A. Fry, Mar. 5, 1889, void (C. C., S. D. Ohio, W. D.) 90 F. 494; (C. C. A. 6th Cir.) 101 F. 723.

399,093 Mattress stuffing machine, E. N. Stephenson, Mar. 5, 1889, not infringed (C. C. A. 6th Cir.) 139 F. 11.

399,150 Conveying apparatus, J. C. Martin, Mar. 5, 1889, held not to infringe 255525 (C. C., D. Mass.) 62 F. 272; (C. C. A. 1st Cir.) 67 F. 786.

399,374 Artificial slate. C. Brown, Mar. 12, 1889, claim 1 void (C. C, N. D. Cal) 97 F. 620.

399,428 Cash carrier apparatus, C. W. McCormick, Mar. 12, 1889, held not to infringe 303006 (C. C. A 8th Cir.) 59 F.776.

399,543 Opera glass holder, W. Mack, Mar. 12, 1889, not infringed (C. C., S. D. N. Y.) 43 F. 69; 52 F. 819.

399,554 Woven wire mat and scraper, R. R. Pease, Mar. 12, 1889, claim 3 void (C. C., D. Minn.) 89 F. 589.

399,801 Alternating current indicator, Thomson & Wightman, Mar. 19, 1889, infringed (C. C., S. D Ohio, W. D.) 137 F 917.

399,844 Inkstand, E. Davis, Mar 19, 1889, not infringed (C. C., E. D. N. Y.) 115 F. 333.

399,867 Woven wire mattress, Gail & Gail, Mar. 19, 1889, not infringed (C. C. A. 3rd Cir.) 93 F. 970.

400,086 Phenacentine, O Hinsberg, Mar. 26, 1889, infringed (C. C. A. 8th Cir.) 84 F. 192; valid, infringed (C.C., E. D. Pa.) 108 F. 233; (C. C. A. 3rd Cir.) 113 F. 870; (C. C., D. Mass.) 133 F. 313.

400,319 Feed-water heater and purifier, C. E. Ferreira, Mar 26,1889, valid, infringed (C. C., N. D. Ill. N. D.) 89 F. 88; reversed (C C. A. 7th Cir.) 89 F. 498.

400,346 Barrel washer, H. E Klamt, Mar. 26, 1889, not infringed (C. C., N. D. Ill., E. D.) 145 F. 633.

400,381 Sleigh runner for wheeled vehicles, D. G. Wyeth, Mar 26, 1889, claim 12 void (C. C A. 6th Cir.) 139 F 389.

400,679 Magazine gun, L. L. Hepburn, Apr. 2, 1889, claims 1 and 5 not infringed (C. C., D. Conn.) 139 F. 31.

400,682 Lubricating device for steam engines; A. L. Ide, Apr. 2, 1889, void (C. C. A. 7th Cir.) 89 F. 491. See Reissue 11730

400,766 Process of reducing aluminum by electrolysis, C. M. Hall, Apr 2, 1889, valid, infringed (C. C., N. D. Ohio, E. D.) 55 F. 301; (C. C., N. D. Ohio, E. D.) 64 F. 125; held not to infringe 464933 and 468148 (C. C., W. D. N. Y.) 111 F. 742; held to infringe 468168 (C. C. A. 2nd Cir.) 125 F. 926.

400,947 Grain drills, J W. Rhodes, Apr. 9, 1889, valid, infringed (C. C., S. D Ill.) 64 F. 218.

400,989 Valve reseating tool, P. J. Wright, Apr. 9, 1889, not infringed (C. C., D. Minn., 4th Div.) 62 F. 275; void (C. C. A. 8th Cir.) 69 F. 621

401,050 Machine for inserting diagonal strips in woven cane work, H. B. Morris, Apr. 9, 1889, not infringed (C. C., D. Mass.) 85 F. 457; (C C. A. 1st Cir) 98 F. 309.

401,085 Lightning arrester, E. Thomson, Apr. 9, 1889, valid, infringed (C C., S. D. N. Y.) 101 F. 587; void (C. C. A. 2nd Cir.) 107 F. 277.

401,498 Wiring structures for electric lighting, Johnson & Greenfield, Apr. 16, 1889, not infringed (C. D., S. D. N. Y.) 62 F. 456.

401,520 Method of operating electro magnetic motors, N. Tesla, Apr. 16, 1889, valid, infringed (C C., S. D. Ohio, W. D.) 106 F. 729: does not anticipate 511559 and 511560 (C. C., N. D. Ill., E. D.) 142 F. 545.

401,618 Hoisting and loading machine, D. S. White, Apr. 16, 1889, not infringed (C. C., D. Minn.) 45 F. 203.

401,680 Valve for pneumatic pipes, E. S. Boynton, Apr. 16, 1889, claim 1 void, claim 2 valid and infringed (C. C., S. D. N. Y.) 44 F 64.

401,770 Dampening machine, Wendell & Wiles, Apr. 23, 1889, valid, infringed (C. C., N. D. N. Y.) 54 F 712; not infringed (C. C. A. 2nd Cir.) 73 F. 301. See Reissue 11727.

401,775 Car coupling, J. Coup, Apr. 23, 1889, not infringed (C. C., W. D. Pa.) 127 F. 351; (C. C. A. 3rd Cir.) 138 F. 411.

401,840 Thrashing machine, F. F. Landis, Apr. 23, 1889, not infringed (C. C. A. 3rd Cir.) 100 F. 94.

401,848 Folding trestle, J. F. Miller, Apr. 23, 1889, valid, infringed (C. C. A. 7th Cir.) 133 F. 541.

401,871 Check protector, E. O. Abbott, Apr 23, 1889, claims 4 and 5 void (C. C., N. D. Ill.) 51 F 223.

401,916 Engineer's brake valve, Westinghouse & Moore, Apr. 23, 1889, valid, infringed (C. C., N. D. N. Y.) 112 F. 424; not infringed (C. C. A. 2nd Cir.) 119 F 874; claim 7 void or not infringed (C. C., N. D. N. Y.) 139 F. 265.

402,140 Machine for shaping sheet metal pipes, J. A. Carr, Apr. 30, 1889 (C. C., S. D. O., W. D.); Plecker v. Poorman, decided Apr. 15, 1905, not reported.

402,719 Harness pad, N. A. Cahoone, May 7, 1889, held not to infringe 302548 and 423797 (C C., D. N. J.) 56 F. 296.

403,137 Vestibule connection for railway cars, G. M. Pullman, May 14, 1889, valid, infringed (C. C., D. Mass.) 44 F. 195.

403,143 Woven wire bed bottom, J. B. Ryan, May 14, 1889, not infringed (C. C. A 3rd Cir.) 93 F. 970,

403,178 Box strap, S. C. Cary, May 14, 1889, valid, infringed (C. C , E. D. N. Y.) 58 F. 786; (C. C., E. D. N. Y.) 71 F 890.

403,247 Reels for box straps, S. C. Cary, May 14, 1889, valid, infringed (C. C., E. D. N. Y.) 88 F. 698; infringed (C. C., S. D. N. Y.) 110 F. 750; not infringed (C. C., S. D. N. Y.) 113 F. 429; (C. C. A. 2nd Cir.) 120 F. 945; valid, infringed (C. C., S. D. N. Y) 127 F. 357; former decree affirmed (C. C. A. 2nd Cir.) 139 F. 262.

403,362 Dust collector, O. M. Morse, May 14, 1889, valid, infringed (C. C., N. D. Ill.) 61 F. 297; 78 F. 878; (C. C , N. D. N. Y.) 83 F. 1014; (C. C., S D. Ohio, W. D.) 89 F. 865.

403,363 Dust collector, O. M. Morse, May 14, 1889, valid, infringed (C. C., N. D. Ill.) 61 F. 297; 78 F. 878; (C. C., N. D. N. Y.) 83 F. 1014; (C. C., S. D. Ohio, W. D.) 89 F. 865.

403,532 Cattle guard, J. T. Hall, May 21, 1889, void (C. C. A. 6th Cir.) 49 F. 157.

403,770 Dust collector, O. M. Morse, May 21, 1889, valid, infringed (C. C., N. D. Ill.) 61 F. 297; 78 F. 878; (C. C., S. D. Ohio, W. D.) 89 F. 865.

403,844 Sheet metal roofing, A. C. Kanneberg, May 21, 1889, held to infringe 188079 (C. C., N. D. Ohio, E. D.) 51 F. 599.

403,939 Combined cabinet and cutter's size ticket, J. Keller, May 28, 1889, valid, infringed (C. C., S. D. N. Y.) 114 F. 608.

404,414 Method of mixing molten pig metal, W. R. Jones, June 4, 1889, valid, infringed (C. C , W. D. Pa.) 89 F. 721; not infringed (C. C A. 3rd Cir.) 96 F. 850; valid, infringed (Sup. Ct.) 185 U. S. 403.

404,844 Valve indicator, D. Kennedy, June 11, 1889, not infringed (C. C., D. Mass.) 75 F. 277; not infringed if valid (C. C. A. 1st Cir.) 80 F. 527.

405,179 Button, P. A. Raymond, June 11, 1889, valid, infringed (C. C., N. D. N.Y.) 79 F. 795; infringed (C. C. A. 2nd Cir.) 84 F. 164.

405,283 Process of chipping or crystalizing glass, T. J. Thompson, June 18, 1889, not infringed (C. C. A. 7th Cir.) 118 F. 575.

405,440 Electric arc lamp, E. A. Sperry, June 18, 1889, held to infringe 420109 (C. C. A. 7th Cir.) 58 F. 186.

405,575 Steam exhaust head, Lyman & Warren, June 18, 1889, held to not infringe 303441 and Reissue 10947 (C. C., N. D. Ill.) 75 F. 665.

405,750 Standing contact arm, C. J. Van Depoele, June 25, 1889, held to anticipate 437961 (C. C , D. N. J.) 95 F. 660.

405,821 Bed spring, Bonnell & Lambing, June 25, 1889, claim 2 void (C. C., D. N. J.) 57 F. 396; (C. C. A. 3rd Cir.) 61 F. 767.

405,874 Celluloid or analagous binding, K. J. Collins, June 25,1889, valid, infringed (C. C., S. D. N. Y.) 68 F. 915.

405,892 Sheaf carrier for self-binding harvester, Kennedy & Steward, June 25, 1892, held not to infringe 456825 (C. C., N. D. Ill.) 66 F. 547.

406,146 Method of making lead traps, A. A. Robinson, July 2, 1889, valid, infringed (C. C., D. N. J.) 135 F. 546.

406,600 Electric railway motor. F. J. Sprague, July 9, 1889, held to not infringe 300828 (C. C. A. 8th Cir.) 77 F. 432.

406,845 Manifold sales book, T. W. Lawson, July 9, 1889, infringed (C. C., W. D. N. Y.) 124 F. 903.

407,030 Brick mold sanding machine, A. H. Newton, July 16, 1889, claim 5 void (C. C., S. D. N. Y.) 97 F. 614.

407,188 Electric railway, S. D. Field, July 16, 1889, void (C. C., E. D. N. Y.) 61 F. 655.

407,260 Steam boiler, A. Stirling, July 10, 1889, not infringed (C. C., W. D. Pa.) 72 F. 780; valid and infringed (C. C., M. D. Tenn.) 137 F. 94.

407,294 See Reissue 11031.

407,306 Apparatus for skelping or tube welding, J. A. Simpson, July 16, 1889, not infringed (C. C., W. D. Pa.) 132 F. 318.

407,313 Currycomb, J. DuShane, July 16, 1889, held to not infringe 220,986 (C. C., N. D. Ohio, E. D.) 77 F. 844.

407,598 Dust collector, O. Kutsche, July 23, 1889, valid, infringed (C. C., S. D. N. Y.) 83 F. 1014.

407,684 Process of treating nuts, A. H Pratt, July 23, 1889, void (C. C., N. D. Ill.) 83 F. 516.

407,735 Sole cutting machine, Loewer & Blair, July 23, 1889, valid, infringed (C. C , N D N. Y.) 55 F. 62; (C. C., E. D. Pa.) 74 F. 555; not infringed (C. C. A. 3rd Cir.) 79 F. 325.

407,963 Incandescent mantle, Rawson & Rawson, July 30,1889, valid, infringed (C. C., S. D. N. Y.) 87 F. 221; (C. C., S. D. N.Y) 94 F. 1004, 1006; valid (C. C. A. 2nd Cir) 96 F.332; (C. C. A. 2nd Cir.) 98 F 613; validity not established (C. C., N. D Ill., N. D.) 100 F 648; not infringed (C. C. A. 2nd Cir.) 101 F. 131; validity questioned (C. C. A. 7th Cir) 104 F. 83.

408,152 Apparatus for charging and drawing furnaces, S. T. Wellman, July 30, 1889, void (C. C., D. Ind.) 106 F. 221.

408,177 Sealing-disk for jars, D. W. Johnson, July 30, 1889 void (C. C., E D. Pa.) 55 F. 659.

408,193 Tool for cutting paper, shades, etc., C. T. Ridgely, July 30, 1889, not infringed (C. C. A. 6th Cir.) 103 F. 875.

408,300 Waistband fastener, J. Ewig, Aug. 6, 1889, not infringed (C. C., D. Md.) 92 F. 992; void (C. C. A. 7th Cir.) 93 F. 677.

408,356 See Reissue 11068.

408,416 Floral letter or design, W. C. Krick, Aug. 6, 1889, held not void on demurrer (C. C., S. D. N. Y.) 52 F. 823; valid, infringed (C. C., S. D. N. Y.) 59 F. 364; void (C. C. A. 2nd Cir.) 61 F. 847

408,475 Sheet heating furnaces, Francis & Banfield, Aug. 6, 1889, valid, infringed (C. C., W. D. Pa) 52 F. 824.

408,638 Contact arm for electric railway motor cars, C. J. Van Depoele, Aug. 6, 1889, held to not anticipate 412155 (C. C., D. N. J) 96 F. 563.

408,879 See Reissue 11079.

408,936 Method of forming teeth of rasps, P. S. Stokes, Aug. 13, 1889, void (C. C., D. N J.) 96 F. 104.

408,987 Dust collector, O. M. Morse, Aug. 13 1889, valid, infringed (C. C , N. D Ill.) 61 F. 297; 78 F. 878.

409,465 Dust collector, N. W. Holt, Aug. 20, 1889, valid, infringed (C. C., N. D. N. Y.) 83 F. 1014; (C. C., S. D. Ohio, W. D.) 89 F 865.

409,530 Incandescent gas lamp, C. A. Von Welsbach, Aug. 20, 1889, claims 3 and 5 void (C. C., D. Conn.) 82 F. 747.

409,596 Mantel, W. Anderson, Aug. 20, 1889, held not to infringe 389340 (C. C., W. D. Pa.) 42 F. 156.

409,606 Folding bedstead, H. S. Hale, Aug. 20, 1889, valid, infringed (C. C. A. 3rd Cir.) 69 F. 158.

409,902 Railway torpedo, W. C. Beckwith, Aug. 27, 1889, valid, infringed (C. C., W. D. Pa.) 75 F. 392.

410,271 Rotary printing machine, J. L Ferin, Sept 3, 1889, claim 6 void (C. C., D. N. J.) 103 F. 650; (C. C. A. 3rd Cir.) 108 F. 253.

410,285 Molds for tubular articles, J. Kinzer, Sept. 3, 1889, held not to infringe 465771 (C. C. A. 3rd Cir.) 76 F. 800.

410,757 Pulverizing mill, E. C. Griffin, Sept. 10, 1889, not infringed (C C , D. Mass.) 111 F. 537.

410,828 Ferrule, S. W. Evans, Jr., Sept 10, 1889, not infringed (C. C., D. N. J.) 121 F. 133; (C. C. A. 3rd Cir.) 126 F. 492.

410,981 Automatic race-course, F. N. Lang, Sept. 10, 1889, held to lack utility (C. C., N. D. Ill.) 40 F. 89.

411,131 Furnace for heating glassware, H. Schulze-Berge, Sept. 17, 1889, not infringed (C C. A 3rd Cir.) 116 F. 186.

411,226 Metallurgical furnace, C. Peifer, Sept. 17, 1889, valid, infringed (C. C , W. D. Pa.) 85 F 780; valid, not infringed (C. C., W. D. Pa.) 106 F. 938; not infringed (C. C. A. 3rd Cir.) 112 F. 435.

411,255 Coaster, J. P. Newburg, Sept. 17, 1889, void (C. C., D. N.J.) 82 F 440; (C. C. A. 3rd Cir.) 87 F. 225.

411,368 Means for capping and sealing milk bottles. Barnhart & Barnhart, Sept 17, 1889, not infringed (C.C.A. 7th Cir.) 91 F. 919.

411,416 Method of making armlets, G. H. Blakesley, Sept. 24, 1889, void (C. C., D. Conn.) 78 F. 480.

411,420 Watch case pendant, W. W. Bradley, Sept. 24, 1889, held to not infringe 287001 (C. C. A. 6th Cir.) 75 F. 17.

411,646 Apparatus for purifying and refining oil, Dorn & Noppel, Sept 24, 1889, not infringed (C. C., E. D. Pa.) 49 F 75.

411,845 Drill grinding machine, O. S. Walker, Oct. 1, 1889, claim 1 void, claims 2 and 6 valid, not infringed (C. C. A. 6th Cir.) 123 F. 67.

411,857 Hook, F. E. De Long, Oct. 1, 1889, valid, infringed (C. C., D. Mass.) 60 F. 273; not infringed (C. C., D. Conn.) 73 F. 476.

412,134 Can and can closure, R. M. Spencer, Oct 1, 1889, void (C.C., E. D. Pa.) 136 F. 418

412,155 Electric railway trolley, A. Anderson, Oct. 1, 1889, valid, infringed (C. C., D. N. J.) 96 F. 563; (C.C., W.D.Mich., S. D.) 109 F. 950; (C. C. A. 6th Cir.) 111 F. 398; (C. C. A. 6th Cir.) 126 F. 755; not infringed (C. C. A. 6th Cir.) 131 F. 78.

412,279 Process of manufacturing linoleum floor cloth, D N. Melvin, Oct. 8, 1889, valid, infringed (C C., E. D. Pa.) 91 F. 151.

412,296 Glove fastening, W. S. Richardson, Oct. 8, 1889, not infringed (C. C. A. 1st Cir.) 96 F. 489.

412,442 Eye glasses, W S. Wells, Oct. 8, 1889, valid, infringed (C. C., S. D. N. Y.) 124 F. 521; not infringed (C. C. A. 2nd Cir.) 127 F. 127.

412,704 Shoe-sewing machine, French & Meyer, Oct. 8, 1889, not infringed (C. C , D. Mass.) 101 F. 990; (C. C. A. 1st Cir.) 110 F. 393.

412,751 Process of manufacturing metallic cross bars and rails for window sashes, W. Henderson, Oct. 15, 1889, void (C. C. A. 7th Cir.) 67 F. 930.

413,293 System of electrical distribution, Thomson & Rice, Oct 22, 1889, valid, claims 1, 3, 4 and 6 infringed (C. C., D. N. J.) 140 F. 445; void (C. C. A. 3rd Cir.) 144 F. 974.

413,341 Spike pointing machine, W. Goldie, Oct. 22, 1889, valid, infringed (C. C., D. Del) 64 F. 237; (C. C., D. Del.) 81 F. 173; (C. C. A. 3rd Cir.) 84 F. 972.

413,342 Method of pointing spikes, W. Goldie, Oct. 22, 1889, valid, infringed (C. C., D. Del.) 64 F. 237.

413,390 Inkstand, E. Davis, Oct. 22, 1889, not infringed (C. C., E.D. N. Y.) 115 F. 333.

413,464 Lantern, F. D Spear, Oct. 22, 1889, claim 1 void, claim 2 not infringed (C. C. A. 3rd Cir.) 136 F. 595.

413,644 Watch protector, Benfield, Aufhauser & Milne, Oct.29, 1889, void (C. C , D. Conn.) 60 F. 614; (C. C. A. 2nd Cir.) 65 F. 507.

413,794 Valve lock, C. M. Stiner, Oct. 29, 1889, valid, infringed (C. C., S. D. N. Y.) 71 F. 183.

414,018 Hot air furnace, F M. Campbell, Oct. 29, 1889, void (C. C., E. D. Mo., E. D.) 63 F. 995.

414,069 Car roof, P. H. Murphy, Oct. 29, 1889, void (C. C., E. D. Mo., E. D.) 70 F 491; not infringed (C. C. A. 8th Cir.) 76 F. 965.

414,272 Dispensing apparatus for soda water, T. I. Witting, Nov. 5, 1889, valid, infringed (C. C., E. D. Pa.) 75 F. 680; claim 2 void (C. C. A. 3rd Cir.) 78 F. 119.

414,761 Phonogram blank, T. A. Edison, Nov. 12, 1889, not infringed (C. C. A. 7th Cir.) 125 F. 922.

414,844 Wire fence machine, Page & Lamb, Nov. 12, 1889, infringed (C. C., E. D. Mich.) 49 F. 936.

415,029 Baling press, P. K. Dederick, Nov. 12, 1889, valid, infringed (C. C., N. D. N. Y.) 50 F. 96.

415,048 Lemon juice extractor, J. P. Manny, Nov. 12, 1889, claim 3 void, claim 4 not infringed by 644736 (C. C. A. 7th Cir.) 145 F. 175

415,068 Metallic window sash bar, H. Schuhmann, Nov.12,1889, held not to infringe 420510 (C. C. A. 7th Cir.) 67 F. 930.

415.113 Harrow, C. La Dow, Nov. 12, 1889, valid, infringed (C. C., N. D N. Y.) 84 F. 336.

415,166 Automatic fire extinguisher, J. R. Freemen, Nov. 12, 1889, not infringed (C C , N.D. Ill., N. D.) 110 F. 528; (C. C. A. 7th Cir.) 110 F. 529.

415,321 Rotary printing machine, J. L. Ferin, Nov. 19, 1889, claim 7 void (C.C., D. N. J.) 103 F. 650; valid, infringed (C C. A.3rd Cir.) 108 F.253; valid (C.C A. 3rd Cir.) 110F. 402.

415,542 Plow, J. Lenhart, Nov. 19, 1889, infringed (C. C. A. 8th Cir.) 130 F. 122.

415,601 Furniture joint, F. R. Beal, Nov. 19, 1889, no decision (C. C., N. D. Ill , N. D.); American School Furniture Co. v. Century Seating Co. No. 25658, decided Nov 12, 1901, not reported.

415,720 Lantern holder, W. A. Lattimore, Nov. 26, 1889, not infringed (C. C. A. 3rd Cir.) 138 F. 62.

416,029 Cash register, I. D. Boyer, Nov. 26. 1889, held not entitled to priority over 499294 (C C., D N. J.) 60 F. 603.

416,193 Electro magnetic motor, N. Tesla, Dec. 3, 1889, held not to anticipate 511559 or 511560 (C. C. A. 6th Cir.) 118 F. 562.

416,324 Chair, W. G. Cross, Dec 3, 1889, held not to infringe 329-805 (C. C. A. 1st Cir.) 57 F. 489.

416,346 Disk harrow, H. M. Rose, Dec. 3, 1889, not infringed (C. C. A. 8th Cir.) 121 F. 835.

416,376 Machinery for manufacture of bottles, D. Rylands, Dec. 3, 1889, claim 1 not infringed, claim 11 infringed (C.C., W. D. Pa.) 102 F. 338.

416,389 Mold for glass bottles, jars, etc., J. R. Windmill, Dec. 3, 1889, infringed (C. C., W. D. Pa.) 102 F. 338.

416,660 School seat hinge, J. Aenis, Dec. 3, 1889, no decision (C.C., N. D. Ill., N. D.); American School Furniture Co. v. Century Seating Co., No. 25658, decided Nov. 12, 1901, not reported.

416,710 Process of producing artificial musk, A. Baur, Dec. 10, 1889, limits 451847 (C. C. A. 2nd Cir.) 142 F 753.

417,202 Manufacture of flexible photographic films, H M. Reichenbach, Dec. 10, 1889, motion for preliminary injunction denied (C. C., N. D. N. Y.) 42 F. 159.

417,340 Journal bearing, W. S. Scales, Dec. 17, 1889, preliminary injunction denied (C. C., E. D. Pa.) 145 F. 356; (C. C., E. D. Pa.) Standard Roller Bearing Co. v. Hess-Bright Mfg. Co., decided May 4, 1906, not reported.

417,451 Pulp-screening machine, E Victory, Dec. 17, 1889, valid, infringed (C. C , N. D. N. Y.) 124 F. 542; (C.C., N. D. N. Y.) 137 F. 418; not infringed (C. C. A. 2nd Cir.) 143 F. 869.

418,014 Surface cattle guard, J. T. Hall, Dec. 24, 1889, void (C. C., A. 6th Cir.) 49 F. 157.

418,199 Disk harrow, P. E. Little, Dec. 31, 1889, void (C. C., S. D. Ohio, W. D.) 69 F. 731.

418,257 Exercising apparatus, A. A. Whitely, Dec. 31, 1889, valid, infringed (C. C., N. D. Ill.) 73 F. 486.

418,349 Power loom, T. Bromley, Jr., Dec. 31, 1889, claims 1 and 2 void (C. C., E. D. Pa.) 51 F. 912.

418,355 Churn, S. D. Palmer, Dec. 31, 1889, void (C. C. A. 7th Cir.) 54 F. 509.

418,356 Churn closure, S. D. Palmer, Dec. 31, 1889, void (C. C. A. 7th Cir.) 54 F. 509.

418,439 Dust shield for car axle boxes, J. A. Brill, Dec. 31, 1889, held to infringe 239702 (C. C., D. Mass.) 75 F. 403.

418,519 Roofing fabric, H. W. Johns, Dec. 31, 1889, not infringed (C. C., S. D. N. Y.) 64 F. 234.

1890

418,678 Electric switch for motor, H. H. Blades, Jan. 7, 1890, claims 1 and 4 void (C. C., D. Ind.) 84 F. 180; valid, infringed (C. C., N. D. Ill., N. D.) 124 F. 222; (C. C. A. 7th Cir.) 128 F. 730.

418,704 Bracket for supporting electric conductors, J. A. Duggan, Jan. 7, 1890, claim 4 void (C. C., D. Mass.) 57 F. 651.

418,758 Electric arc-lamp, C. E. Scribner, Jan. 7, 1890, held to infringe 219208 (C. C., N. D. Ohio) 43 F. 533; held not to infringe 219208 (C. C., N. D. Ill.) 69 F. 240; (C. C. A. 7th Cir.) 76 F. 761.

418,924 Spring clasp, J. Nase, Jan. 7, 1890, held to infringe 301884 (C. C., D. Conn.) 52 F. 587; held not to infringe 301884 (C. C. A. 2nd Cir.) 58 F. 411.

419,078 Calf weaner, S. E. Shaw, Jan. 7, 1890, not infringed (C. C., S. D. Iowa, C. D.) 89 F. 313.

419,239 Welt guide for sewing machines, G. A. Bates, Jan. 14, 1890, not infringed (C. C., D. Mass.) 82 F. 100.

419,292 Method of making irregular shaped metal articles, G. F. Simonds, Jan. 14, 1890, valid, infringed (C. C. A. 1st Cir.) 93 F. 958; (C. C., D. Me.) 90 F. 201.

419,827 Gas stove, J. H Carrington, Jan. 21, 1890, not infringed (C. C., S. D. N. Y.) 64 F. 854; (C. C. A. 2nd Cir.) 71 F. 298.

419,863 Revolving hook sewing machine, A. Miller, Jan. 21, 1890, valid, infringed (C. C., E. D. Mo., E. D.) 61 F. 100.

420,109 Electric arc lamp, C. E. Scribner, Jan. 28, 1890, infringed (C. C. A. 7th Cir.) 58 F. 186.

420,225 Gas stove, J. H. Carrington, Jan. 28, 1890, not infringed (C. C., S. D. N. Y.) 64 F. 854; (C. C. A. 2nd Cir.) 71 F. 298.

420 510 Window sash bar, W. Henderson, Feb. 4, 1890, not infringed (C. C. A. 7th Cir.) 67 F. 930.

420,792 Machine for making and printing envelopes, C. H. Heywood, Feb. 4, 1890, not infringed (C. C., D. Mass.) 116 F. 200; (C. C. A. 1st Cir.) 122 F. 464.

420,812 Oil can and filler, E. W. Luce, Feb. 4, 1890, valid and infringed (C. C., N. D. O., W. D.); Delphos Can. Co. v. Standard Oil Can Co., No. 1781, decided Feb. 1904, not reported.

421,244 Method of hulling peas, Chisholm & Chisholm, Feb. 11, 1890, valid, infringed (C. C., D. Del.) 106 F. 191; void (C. C. A. 3rd Cir.) 115 F. 625; valid, infringed (C. C., D. Del.) 133 F. 924; (C. C., E. D. Wis.) 135 F. 815.

421,454 Combined cooker and cake former for oil meal, Vaile & Tompkins, Feb. 18, 1900, claim 3 void, claims 1, 2, 4 and 9 valid, infringed (C. C. A 6th Cir.) 117 F. 410.

421,588 Furnace mouth lining, Lamprey & Bugbee, Feb. 18, 1890, valid, infringed (C. C., D. N. H.) 62 F. 590.

421,797 Method of charging furnaces, S. T. Wellman, Feb. 18, 1890, void, not infringed (C. C., D. Ind.) 106 F. 226; void (C. C. A. 7th Cir.) 117 F. 825.

421,928 Surface cattle guards, J. T. Hall, Feb. 25, 1890, void (C. C. A. 6th Cir.) 49 F. 157.

422,305 Wheel for door hangers, W. J. Lane, Feb. 25, 1890 void (C. C., S. D. N. Y.) 141 F. 1000.

422,879 Wrench for oil well tools, W. Forgie, Mar. 4, 1890, void (C. C., W. D. Pa) 57 F. 742; (C. C. A. 3rd Cir.) 58 F. 871.

423,200 Transplanting machine, C. G. Alward, Mar. 11, 1890, claim 1 void (C. C , N. D. N. Y.) 69 F. 999.

423,317 Appliance for use with incandescent gas lamp, A. Heald, Mar. 11, 1890, not infringed (C. C., S. D. N. Y.) 145 F. 521.

423,415 Machine for making paper boxes, S. G. Damren, Mar. 18, 1890, claim 1 infringed, claims 3 and 5 not infringed (C. C. A. 1st Cir.) 111 F. 403.

423,558 Method of producing imitation press copied letters, S. Hall, Mar. 18, 1890, claim 1 void (C. C., S. D. N. Y.) 110 F. 375; (C. C. A. 2nd Cir) 114 F. 747.

423,679 Whip-socket attachment, D. D. Frazer, Mar. 18, 1890, held not to infringe 166724 (C. C., D. Mass.) 49 F. 459.

423,723 Transplanting machine, F. A. Bemis, Mar. 18, 1890, not infringed (C. C., N. D. N. Y.) 59 F. 157; claim 1 void (C. C. A. 7th Cir.) 121 F. 85.

423,724 Transplanter, F. A. Bemis, Mar. 18, 1890, not infringed (C. C., N. D. N. Y) 59 F. 157; claim 6 void, claims 3 and 4 void or not infringed (C. C A. 7th Cir.) 121 F. 85.

423,795 Car axle box lid, G W. Morris, Mar. 18, 1890, claims 4 and 5 valid, infringed, claims 1, 2 and 7 not infringed (C. C , D. Del) 78 F. 129; not infringed (C. C. A. 3rd Cir.) 81 F. 407.

423,797 Harness pad, H. L Narramore, Mar. 19, 1890, not infringed (C. C., D. N. J.) 56 F. 296.

423,998 Brake shoe, C. Herron, Mar. 25, 1890, void (C. C., N.D.Ill., E. D) 143 F 540.

424,291 Apparatus for recording measurements of time, space or quantity, E. M. Hamilton, Mar. 25, 1890, valid, infringed (C. C., D. Mass.) 132 F. 20; infringed (C.C., D.Mass.) 136 F. 196; not infringed (C. C. A. 1st Cir.) 144 F. 91.

424,314 Burr wheel for knitting machines, P. S. Kinsey, Mar. 25, 1890, valid, infringed (C. C., S. D N. Y.) 115 F. 527; (C. C. A. 2nd Cir.) 119 F. 921; void (C. C., N. D. N. Y.) 138 F. 92.

424,357 Pepsin, J. B. Russell, Mar. 25, 1890, held not to infringe 286-138 (C. C., D. N. J.) 59 F. 290.

424,695 Suspended switch and traveling contact for electric railways, C. J. Van Depoele, Apr. 1, 1890, valid, infringed (C. C., N. D. N. Y.) 69 F 257; claims 2, 9 and 10 void, claims 3, 4, 11, 19, 20, 23, 25, 26, 27, 32 and 33 valid, infringed, claims 15, 16 and 17 not infringed (C. C. A. 2nd Cir.) 71 F 396; infringed (C. C., N. D. Ohio, E. D.) 78 F. 139; valid, infringed (C. C A. 6th Cir.) 80 F. 712; preliminary injunction denied (C. C., N. D. Ill., E. D.) 143 F. 534; held to anticipate 495443 (C. C., S D. N. Y.) 112 F. 534.

424,905 Weather strip, A. C. Sims, Apr. 1. 1890, valid, infringed (C. C, D. Md.) 132 F. 161; (C. C. A. 4th Cir.) 136 F. 187; right to recovery of profits denied (C. C., D Md.) 145 F. 944.

424,964 Oil or gas burner, F. R. Fennessy, Apr. 8, 1890, validity questioned, not infringed (C. C, S. D. N. Y.) 126 F.189.

424,971 Cloth pressing machine. D. Gessner, Apr. 8, 1890, claims 1, 4 and 11 to 16 not infringed, claim 2 void (C.C., S. D. N. Y.) 63 F. 954.

425,416 Water closet, Frame & Neff, Apr. 15, 1890, valid, infringed (C. C. A 1st Cir.) 125 F 293.

425,584 Breech-loading cannon, S. Seabury, Apr. 15, 1890, valid, infringed (C C., D. Md.) 62 F. 584; not infringed (Sup. Ct.) 1896 C. D. 329; 162 U. S. 425.

425,653 Motor truck for cars, Brill & Brill, Apr. 15, 1890, not infringed (C. C, E. D. Mo., E. D.) 80 F. 909

425,839 Twist drill grinding machine, O S. Walker, Apr. 15, 1890, claim 1 valid, infringed, claim 2 valid, not infringed (C. C. A. 6th Cir.) 123 F. 67.

425,921 Tank for water closet, P. White, Apr. 15, 1890, not infringed (C C., E. D. Mo, E. D.) 63 F 841.

426 067 Apparatus for coiling metal rods, H. Roberts, Apr. 22, 1890, valid, infringed (C. C., N. D. Ohio E. D.) 53 F. 916.

426,160 Tack driving machine, E. Woodward, Apr. 22, 1890, held to infringe 248544 (C. C., D. Mass.) 53 F. 481.

426,390 Door hanger, W. J. Lane, Apr 22, 1890, void (C C., S. D. N. Y) 141 F. 1000.

427 220 Pliers, W. A. Bernard, May 6, 1890, valid, infringed (C. C., D. Conn.) 84 F. 674; held to not infringe 329133 (C. C., D. Conn.) 88 F. 793; claim 1 valid, infringed, claim 2 not infringed (C. C. A. 2nd Cir.) 91 F. 775.

427,497 Punch, W. A. Bernard, May 6, 1890, void (C. C., D. Conn.) 84 F. 674.

427,521 Electric switch, Platt & Orford, May 6, 1890, void (C. C., D. Conn.) 72 F. 266.

427,621 Multiple switch board test system, C. E. Scribner, May 13, 1890, void (C. C., W. D. N. Y.) 142 F. 766.

428,068 Railway car, J A. Brill, May 20, 1890, not infringed (C. C., E. D. Mo., E. D.) 80 F. 909.

428,123 Wire coupling, D. B. Morrison, May 20, 1890, valid, infringed (C. C. A 6th Cir.) 97 F. 502; 123 F. 91.

428,169 Electric motor regulator, W. H. Knight, May 20,1890,valid, infringed (C. C., S. D. N. Y.) 103 F. 641; claims 1, 2, 3 and 4 void (C. C. A. 2nd Cir.) 107 F. 711. See Reissue 11918.

428,508 Crocheting or overseaming machine, J M. Merrow, May 20, 1890, valid, infringed (C. C., E. D. Pa.) 59 F. 120; not infringed (C. C. A. 3rd Cir.) 61 F 945.

428,650 Alternating current motor, E Thomson, May 27, 1890, infringed (C. C., S. D. Ohio, W. D.) 137 F. 917.

428,672 Steam actuated valves, R. L. Frost, May 27, 1890, valid, not infringed (C. C. A. 6th Cir.) 104 F. 337.

428,753 Fountain inkstand, F. Guinter, May 27, 1890, valid, not infringed (C. C , W. D. N. Y) 106 F. 178.

428,907 See Reissue 11252

428,908 Chop-grader, C. Haggenmacher, May 27, 1890, valid, infringed (C. C., E. D. Pa.) 88 F. 486.

429,021 Ventilating barrel, J. F. East, May 27, 1890, void or not infringed (C. C., E. D. N. C.) 119 F. 594; valid, infringed (C. C. A. 4th Cir.) 127 F. 691.

429,031 See Reissue 11104.

429,296 Brick machine, White & Boyd, June 3, 1890, claim 10 void (C. C., D. Ind) 115 F. 738; (C. C. A. 7th Cir.) 123 F. 427.

429,516 Powder, R. Von Freeden, June 3, 1890, claim 2 void, not infringed (C. C., D. Del.) 122 F. 944; claim 1 valid,not in. fringed, claim 2 void (C C. A. 3rd Cir.) 134 F. 862.

429,530 Button, Jackson & Platt, June 3, 1890, void or not infringed (C. C., D. Conn) 92 F. 151.

429,828 Holder for shoe button fastener, A. G. Wilkins, June 10, 1890, valid, infringed (C. C., N. D. Ohio, W. D) 89 F. 982.

429,874 Stone sawing machine, G. N Williams, Jr., June 10, 1890, valid, infringed (C. C., E. D N. Y.) 111 F. 380; (C. C., E D. N. Y.) 130 F. 896; (C. C. A. 2nd Cir.) 137 F. 910.

429,885 Roofing fabric, W. H. H. Childs, June 10. 1890, valid, infringed (C. C., E. D Pa.) 99 F. 87; (C. C. A. 3rd Cir.) 101 F. 989

429,939 Valve reseating machine, C. L. Morse, June 10, 1890, held not to infringe 400989 (C. C., D Minn., 4th Div.) 62 F. 275.

430,278 Phonograph, T. A. Edison, June 17, 1890, infringed (C. C., E. D. N. Y.) 117 F. 149; (C. C., S. D. N. Y) 119 F. 178.

430,328 Alternating current motor, E. Thomson, June 17, 1890, not infringed (C. C. A. 2nd Cir.) 126 F. 170.

430,346 Braiding machine, H. Lauferty, June 17, 1890, void (C. C., S. D. N Y.) 67 F 1015

430,350 Speculum, McCully & McCully, June 17, 1890, not infringed (C. C., S D. N. Y.) 103 F. 648.

430,418 Car truck, Brill & Brill, June 17, 1890, not infringed (C. C., E. D. Mo., E. D.) 80 F 909.

430,487 Electric crane, A. J. Shaw, June 17, 1890, claims 1, 2 and 10 void (C C., D. N. J.) 77 F. 992; claims 1 and 2 void (C. C A. 2nd Cir.) 86 F. 466.

430,505 Gas engine, Barrett & Daly, June 17, 1890, void (C. C , N. D. Cal.) 88 F. 86.

430,722 Arc lamp, J. J. Wood, June 24, 1890, held to infringe 219208 (C. C., N. D. Cal.) 52 F 965.

430,755 Clamp for brake beams, H. B. Robischung, June 24, 1890, claim 2 void (C. C., E. D. Mo., E. D) 99 F. 758; (C. C. A. 8th Cir.) 106 F. 693.

431,720 Electric railway, R. M. Hunter, July 8. 1890, held to anticipate 393323 (C. C., E. D. N. Y.) 108 F. 244.

431,957 Stitch breaking and raveling attachment for machine for sewing looped fabrics, A. L. Traver, July 8, 1890, valid, infringed (C. C., D. Vt.) 62 F. 933; (C. C., D. Vt.) 63 F. 834; not infringed (C. C. A. 2nd Cir.) 70 F. 810.

432,115 Street car, J. A. Brill, July 15, 1890, claims 1, 4 and 6 not infringed, claim 3 void (C. C. A. 8th Cir.) 90 F. 666.

432,411 Album, C. Jaeger, July 15, 1890, valid, infringed (C. C., E. D. Pa.) 58 F. 973; valid, not infringed (C. C. A. 3rd Cir.) 61 F. 105

432,451 Perfume holder, H. Tappan, July 15, 1890, void or not infringed (C. C., E. D. Pa.) 50 F. 103.

432,582 Whip lash braiding machine racer, J. A. Turner, July 22, 1890, not infringed (C. C , D. Mass.) 100 F. 845; (C. C., D. Mass.) 134 F 395

432,583 Sheet metal knob, W. A. Turner, July 22, 1890, valid, infringed (C. C., D. Mass.) 58 F 246.

432,754 Mining machine, F. M. Lechner, July 22, 1890, valid, infringed (C. C., S. D. Ohio, E. D.) 76 F. 981; not infringed (C. C. A. 6th Cir.) 83 F. 191.

433,088 Water meter with revolving piston, L. H. Nash, July 29, 1890, valid, infringed (C. C., D. N. J.) 122 F. 75; void (C. C. A. 3rd Cir.) 127 F. 563.

433,187 Safety cut out, M. S. Shapleigh, July 29, 1890, not infringed (C. C , E. D. Pa.) 61 F. 828.

433,531 Windmill, S. W Martin, Aug. 5, 1890, void (C.C., D.Neb.) 71 F. 701; valid, infringed (C. C. A. 8th Cir.) 82 F. 327; (C. C., N. D. Ill., N. D.) 85 F. 782; void (C. C. A. 7th Cir.) 89 F. 333; 106 F. 230; claim 1 void (Sup. Ct) 177 U. S. 485.

433,791 Coil clasp for fastening belts, C. Jackson, Aug. 5, 1890, valid, infringed (C. C., E. D. Pa.) 120 F. 282; infringed (C. C. A. 3rd Cir.) 123 F. 882; (C. C. A. 3rd Cir.) 129 F. 756; 130 F. 893; 132 F. 978; 137 F. 417; 138 F. 833; void as to belts (C. C., E. D. Pa.) 142 F. 868.

434,062 Breech loading gun, L. L. Hepburn, Aug. 12, 1890, claims 10, 11, 12 and 21 not infringed, claim 27 infringed (C.C., D. Conn,) 139 F. 31; claim 27 not infringed (C. C. A. 2nd Cir.) 145 F. 631.

434,068 Die for use in making axles, W. J. Parmelee, 9 App. D. C.

434,087 Electric rail connector, C. A. Leib, Aug, 12, 1890, void (C. C., N. D Ill.) 48 F. 722; (C. C. A. 7th Cir.) 54 F. 385.

434,153 Incandescent lamp socket, P. Lange, Aug. 12, 1890, infringed (C. C., E. D. Pa.) 124 F. 537; valid, infringed (C. C. A. 3rd Cir.) 128 F. 922.

434,539 Method of ornamenting watch case centers, F. Ecaubert, Aug. 19, 1890, cancelled (C. C., E. D. N. Y.) 62 F. 742, 748.

434,544 Hay carrier elevating pulley W. Louden, Aug. 19, 1890, valid, infringed (C. C., W. D. Wis) 141 F. 975.

434,696 Process of extracting oils, C. F. Binder, Aug. 19, 1890, not infringed (C. C., N. D. Ga.) 73 F. 480.

434,890 Weather strip, C. Saville, Aug.19,1890, held not to infringe 381166 (C. C., D. N. J.) 58 F. 371.

435,042 Wire fence machine, A. Land, Aug.26,1890, held to infringe 414844 (C. C., E. D. Mich) 49 F. 936.

435,613 Book sewing machine, Reynolds & Jacobs, Sept. 2, 1890, valid, claims 3 and 15 infringed (C. C , S. D. N. Y.) 144 F. 423.

435,835 Method of ornamenting watch case centers, A. W. Hoffman, Sept. 2, 1890, held entitled to priority over 434539 (C. C., E. D. N. Y.) 62 F. 742.

435,995 See Reissue 11153.

436,122 Double pole snap switch, H. H. Crowell, Sept. 9, 1890, held not to infringe 247103 (C. C., N. D. N. Y.) 62 F. 588.

436,792 Can body making machine, P. Jordan, Sept. 23, 1890, not infringed (C. C , N. D. Cal.) 137 F. 86; claims 64 and 69 infringed by 712998 (C. C. A. 9th Cir.) 142 F. 141.

436,916 Typewriting machine, J. B. Gathright, Sept. 23, 1890, claims 4 and 5 not infringed (C. C., S. D. N. Y.) 138 F. 108.

437,018 See Reissue 11439.

437,161 Glove fastener, A. G. Mead, Sept. 23, 1890, infringement questioned (C. C., N. D. N. Y.) 94 F. 523.

437,588 Ink, W. C. Fuerth, Sept. 30, 1890, valid, infringed (C. C., N. D. Ill.) 86 F. 149.

437,667 Electrical switch, Stanley & Cutter, Sept. 30, 1890, void (C. C., E. D. Pa.) 65 F. 94; claims 4 and 5 void or not infringed (C. C., S. D. N. Y.) 97 F. 804; claims 4 and 5 void (C. C. A. 2nd Cir.) 101 F. 120.

437,785 Barrel heading machine, J. J. Mulvaney, Jr., Oct. 7, 1890, not infringed (C. C., N. D. N. Y.) 83 F. 755.

437.961 Trolley, I. F. Baker, Oct. 7, 1890, void (C. C., D. N. J.) 95 F. 660.

438,470 See Reissue 11144.

438,548 Vapor burner, W. R. Jeavons, Oct. 14, 1890, not infringed (C. C , E. D. Mich., S. D.) 131 F. 740.

438,574 Temporary file, A. Dom, Oct. 14, 1890, held not to infringe 217907 (C. C., S. D. Ohio, W. D.) 65 F. 599.

438,655 Buttonhole machine, Tebbetts & Doggett, Oct. 21, 1890, held to infringe 447791 (C. C., D. Conn.) 72 F. 185; held to not infringe 447791 (C. C. A. 2nd Cir.) 79 F. 432.

438,709 Bottle stopper, W. Painter, Oct. 21, 1890, valid on demurrer (C. C., D. N. J.) 47 F. 59.

438,788 Lightning arrester, A. C. White, Oct. 21, 1890, claim 1 infringed, claim 4 not infringed (C. C , E. D. Mo., E. D.) 111 F. 175; infringed (C. C. A. 8th Cir.) 113 F. 652.

439,086 Purse, C. E. Albright, Oct. 28, 1890, valid, infringed (C. C., E D. Pa.) 131 F. 473; not infringed (C. C. A. 3rd Cir.) 139 F. 387.

439,142 Barrel hooping machine, F. Glankler, Oct. 28, 1890, valid, infringed (C. C., N. D. N. Y.) 62 F. 928.

439,166 Packer for deep wells, B. Masseth, Oct. 28, 1890, not infringed (C. C., W. D. Pa.) 111 F. 409; (C.C.A. 3rd Cir.) 119 F. 171.

439,920 Button, Williams & Lade, Nov. 4,1890, not infringed (C.C , D. Ky.) 95 F. 479.

440,000 Can making machine, E. Norton, 83 F 512.

440,168 Band for protecting screw threads of pipes, J A. Kurtz, Nov. 11, 1890, valid, infringed (C. C. A. 3rd Cir.) 77 F. 206; infringement not shown (C. C. A. 3rd Cir.) 95 F. 136.

440,246 Dress stay, M. P. Bray, Nov. 11, 1890, void (C. C., D. N.J.) 75 F. 294; valid, infringed (C. C. A. 3rd Cir.) 77 F. 303.

440,863 Rod mill plant, I. A. Kilmer, Nov. 18, 1890, held to not infringe 289524 (C. C., S. D. N. Y.) 70 F. 1012.

441,022 Method of baling cotton H. Rembert, Nov. 18, 1890, void or not infringed (C. C. A. 5th Cir.) 129 F. 355.

441,353 Box strap, S. C. Cary, Nov. 25, 1890, not infringed (C. C., E. D. N. Y.) 88 F. 698.

441,354 Method of and machine for making box straps, S. C. Cary, Nov. 25, 1890, not infringed (C. C., E. D. N. Y.) 88 F. 698.

441,569 Folding bed, H. W. Ladd, Nov. 25, 1890, void (C. C., D. Mass.) 122 F. 811.

441,646 Paper folding machine, J. L. Cox, Dec. 2, 1890, held to infringe 291521 and 376053 (C. C., D. Mass.) 64 F. 782.

441,846 Paper tube, D. N. Hurlbut, Dec. 2, 1890, not infringed (C. C., S. D. N. Y.) 119 F. 188; void (C.C.A. 2nd Cir.) 124 F. 66.

441,962 Saw set, C. Morrill, Dec. 2, 1890, not infringed (C.C.A. 2nd Cir.) 142 F. 756.

442,461 See Reissue 11311.

442,484 Can body making machine, M. Jensen, Dec. 9, 1890, held not to infringe 250096, 250266, 366482,395795 and 444000 (C. C. A. 9th Cir.) 67 F. 236.

442,531 Store service ladder, E. M. Murray, Dec. 9, 1890, valid, infringed (C. C. A. 7th Cir.) 138 F. 564.

442,582 Box stay machine, J. A. Horton, Dec. 9, 1890, held to infringe Reissue 11167 (Sup. Ct.) 130 U. S. 383.

442,645 Band saw mill, S. R. Smith, Dec. 16, 1892, infringed (C. C., N. D. Cal.) 57 F. 934; valid, not infringed (C. C. A. 9th Cir.) 62 F. 444.

442,855 Apparatus for reheating and finishing glassware, M.R.Caldwell, Dec. 16, 1890, not infringed (C. C. A. 3rd Cir.) 116 F. 186.

442,905 Steam actuated engine valve, F. M. Metcalf, Dec. 16, 1890, held to not infringe 428692 (C. C. A. 6th Cir.) 104 F. 337.

443,199 Boot or shoe last, Sacks & Richmond, Dec. 23, 1890, infringed (C. C., D. Mass.) 74 F. 935; void (C. C. A. 1st Cir.) 81 F. 403.

443,445 Can seaming machine, M. Jensen, Dec. 23, 1890, held to not infringe 267014 and 294065 (C. C., D. Oreg.) 81 F. 494; held to not infringe 267014, 274363, 294065 and 322060 (C. C. A. 9th Cir.) 90 F. 415.

443,637 See Reissue 11250.

443,802 Carving machine, Smith & Post, Dec. 30, 1890, not infringed (C. C. A. 7th Cir,) 126 F. 171.

1891

444,000 Can body forming and side seam soldering machine, F. M. Leavitt, Jan. 6, 1891, not infringed (C. C. A. 9th Cir.) 67 F. 236.

444,233 Paper tube, H. Denney, Jan. 6, 1891, held not to infringe 441846 (C. C., S. D. N. Y.) 119 F. 188.

444,248 Spring toothed harrow, H. V. Miller, Jan. 6, 1891, held not to infringe 201946 (C. C., D. Ind.) 67 F. 130.

444,546 Hay carrier apparatus, W. Louden, Jan. 13, 1891, valid, infringed (C. C., W. D. Wis.) 141 F. 975.

444,561 Poultry crate, R. G. Thomasson, Jan. 13, 1891, not infringed (C. C., E. D. Va.) 74 F. 243; (C. C. A. 4th Cir.) 78 F. 491.

444,642 Luggage carrier for cycles, Allen, Sachtleben & Walters, Jan. 13, 1891, void (C. C. A. 7th Cir.) 80 F. 540.

444,652 Apparatus for coiling metal rods, H. Roberts, Jan. 13, 1891, valid, infringed (C. C., N. D. Ohio, E. D.) 53 F. 916.

445,217 Thermal cut out, A. Barrett, Jan. 27, 1891, not infringed (C. C., S. D. N. Y.) 113 F. 430.

445,235 See Reissue 11282.

445,308 Motor truck for cars, J. A. Brill, Jan. 27, 1891, valid, infringed (C. C., E. D. Pa.) 109 F. 901.

445,342 Process of fumigating trees, Wall, Jones & Bishop, Jan. 27, 1891, void (C. C., S. D. Cal.) 61 F. 291; (C. C. A. 9th Cir.) 66 F. 552.

445,494 Loop holding mechanism for knitting machine, H. Brinton, Jan. 27, 1891, not infringed (C. C., E. D. Pa.) 87 F. 561.

445,647 Gang edger, F. N. Armstrong, Feb. 3, 1891, valid, infringed (C. C., D. Minn , 4th Div.) 64 F. 583; claims 1 and 3 void (C. C. A. 8th Cir.) 69 F. 827.

445,814 Seamless plated wire, G. U. Meyer, Feb. 3, 1891, infringed (C. C., D. Mass.) 128 F. 927.

446,151 Manhole cover, R. Munroe, Feb. 10, 1891, not infringed (C. C., W. D. Pa.) 143 F. 989.

446,230 Grain drill, W. F. Hoyt, Feb. 10, 1891, valid, infringed (C. C.A. 6th Cir.) 101 F. 716; (C.C. A 6th Cir.) 127 F.143; infringed (C. C., D. Minn., 4th Div.) 108 F. 67; valid, infringed (C. C. A. 8th Cir.) 118 F. 136; validity questioned, not infringed (C. C., W. D. Ky.) 118 F. 143; infringed (C. C. A. 8th Cir.) 121 F. 988; 124 F. 736.

446,780 Car roof, C. M. Jennings, Feb. 17, 1891, held to not infringe 414069 (C. C. A. 8th Cir.) 76 F. 965.

447,023 Electro heating apparatus, C. E. Carpenter. Feb. 24, 1891, plea overruled (C. C., S. D. N. Y.) 145 F. 946.

447,064 Atomizer, A. M. Shurtleff, Feb. 24, 1891, claims 1 and 2 void (C. C., D. Mass.) 70 F. 710; (C. C. A. 1st Cir.) 74 F. 634.

447,179 Down draft furnace, M. C. Hawley, Feb. 24, 1891, void or not infringed (C. C., D. Mass.) 96 F. 221; void (C.C., E. D. Mo., E. D.) 96 F. 418.

447,225 See Reissue 11167.

447,360 Process of manufacturing mineral wool, C. H. Rockwell, Mar. 3, 1891, valid, infringed (C. C., D. W. Va.) 75 F. 400; void (C. C. A. 7th Cir.) 125 F. 770.

447,461 Folding screen, J. W. Campbell, Mar. 31, 1891, void (C. C. A. 7th Cir.) 71 F 416.

447,532 Tilting bin, B. R. Bacon, Mar. 3, 1891, void (C. C., E. D. Pa.) 138 F. 919; (C. C. A. 3rd Cir.) 145 F. 832.

447,757 Incandescent gas burner and method of using the same, H.C. Campbell, Mar. 10, 1891, valid and infringed (C. C , N. D. N. Y.) 137 F. 940; preliminary injunction denied, validity questioned (C. C., D. R. I.) 140 F. 348.

447,791 Machine for cutting and stitching buttonholes, J. B. Osterhout, Mar. 10, 1891, infringed (C. C., D. Conn.) 72 F. 185; not infringed (C. C. A. 2nd Cir.) 79 F. 432.

448,072 Construction of pleasure canal, A. Pickard, Mar. 10, 1891, valid, infringed on motion for injunction (C. C., E. D. N. Y.) 124 F. 229, 233.

448,260 Suspension for electric railway motor, E. W. Rice, Jr., Mar. 17, 1891 (C. C., D. Mass.) 83 F. 203; not infringed (C.C. A. 1st Cir.) 91 F. 767.

448,793 See Reissue 11216.

448,802 Process of refining zinc, J.W.Richards, Mar. 24, 1891, valid, infringed (C. C., E. D. Pa.) 55 F. 988.

448,827 Air brake valve, G. Westinghouse, Jr., Mar. 24, 1891, valid, infringed (C. C., S. D. N. Y.) 59 F. 581; void (C. C. A. 2nd Cir.) 63 F. 962.

449,106 Telephone circuit and apparatus, J. J. Carty, Mar. 31, 1891, valid, infringed (C C., W. D. Pa.) 88 F. 505; (C. C. A. 3rd Cir.) 95 F. 152; infringement questioned (C. C., W. D. Pa.) 100 F. 301; void (C. C., W. D. Pa.) 113 F 834; (C. C. A. 3rd Cir.) 133 F. 547.

449,280 Coin holder, H. M. Brigham, Mar. 31, 1891, held not to infringe 373223 (C. C. A 7th Cir.) 64 F. 594.

449,880 Supply connections for basin or bath, E. Hammann, Apr 7, 1891, void (C. C., E. D. Wis.) 110 F. 772; (C. C. A. 7th Cir.) 120 F. 1019.

450,057 Apparatus for cutting pearl buttons, J. Cleret, Apr. 7, 1891, valid, infringed (C. C , E. D. Pa.) 75 F. 657.

450,124 Bookcase, H. J. Hoffman, Apr. 7, 1891, void (C. C., S. D. N. Y.) 73 F. 831; void (C. C., S. D. N. Y.) 84 F. 893; valid (Sup. Ct. D. C.) 1894 C. D. 474; void (Sup Ct. U. S) 1899 C. D. 352; 174 U. S 492; 12 App. D. C. 201.

450,216 Pocket savings bank for coins, F. H. Brown, Apr. 14, 1891, not infringed (C. C., S. D. N. Y.) 124 F. 900.

450,435 Shipping case, E. M Thompson, Apr. 14, 1891, void (C. C. A. 7th Cir.) 89 F. 197.

450,444 Tubular lantern, L. F. Betts, Apr. 14, 1891, not infringed (C. C., N. D. N. Y.) 58 F. 367.

450,592 Typewriting machine, J. H. Schulte, Apr. 14, 1891, not infringed (C. C., S. D. N Y.) 138 F. 108.

450,624 Can heading machine, C. B. Kendall, Apr. 21, 1891, held to infringe 267014 (C C., N. D. Cal.) 57 F. 929; priority denied (C. C.. N. D. Cal.) 85 F. 666.

450,753 Box strap, S. C. Cary, Apr. 21, 1891, held to anticipate Design 28142 (C. C., S. D. N. Y.) 90 F. 725.

450,844 Buttonhole stitching and barring machine, Reed & Dahl, Apr. 21, 1891, held not to infringe 240546 (C.C., D.Mass.) 54 F 884.

450,950 Buttonhole stitching and barring machine, Reed & Dahl, Apr. 21, 1891, held not to infringe 240546 (C C., D.Mass.) 54 F. 884.

451,070 Button fastener, G W. Prentice, Jan. 26, 1891, void (C. C., S. D. Ohio, W. D.) 69 F. 592; (C. C. A. 6th Cir.) 72 F. 520.

451,075 Computing weighing and price scale, Sanderson & Ozias, Apr. 28, 1891, not infringed (C. C. A. 6th Cir) 126 F. 639

451,459 Paper splitting and folding machine, J. L. Cox, May 5, 1891, held to infringe 291521 and 376053 (C.C., D.Mass.) 64 F. 782.

451,847 Artificial musk, A. Baur, May 5, 1891, void (C. C., S. D. N. Y) 135 F. 102; not infringed (C. C. A. 2nd Cir.) 142 F. 753.

452,268 Typewriter machine, J. B. Gathright, May 12, 1891, not infringed (C. C., S. D N. Y.) 138 F. 108.

452,320 Swivel hook, E. L. Robinson, May 12, 1891, valid, infringed (C. C., D. R. I.) 138 F. 140.

452,553 Excelsior machine, J. B. Johnson, May 19, 1891, void (C.C., D. Ind.) 61 F. 829.

452,618 Bosh plate for blast furnace, J. Scott, May 19, 1891, claims 1 to 5 valid, infringed, claim 6 void (C. C. A. 3rd Cir.) 125 F. 285; valid, infringed (C. C. A. 3rd Cir.) 130 F. 455.

452,733 Process of making mineral wool, C. H. Rockwell, May 19, 1891, valid, infringed (C. C., D. W. Va.) 75 F. 400; not infringed (C. C. A. 7th Cir.) 125 F. 770.

452,754 See Reissue 11313.

452,894 Workman's time recorder, W. L. Bundy, May 26, 1891, infringed (C. C. A. 6th Cir.) 94 F. 524.

452,898 Dry pressing, sheet tying, smashing and tableting machine, J. W. Jones, 16 App. D. C. 23; 184 U. S. 598.

452,911 Material for picture mat, R. W. Bainbridge, May 26, 1891, void (C. C., D. N. J.) 57 F. 213.

453,290 Knitting machine, McMichael & Wildman, June 2, 1891, valid, infringed (C. C., N. D. N. Y.) 105 F. 380.

453,955 Operating device for elevator, N. C. Bassett, June 9, 1891, not infringed (C. C., D. Me.) 119 F. 928; void (C. C. A. 1st Cir.) 127 F. 557.

454,048 Road grader, J. A. Houser, June 16, 1891, held to not infringe 379550 and 380068 (C. C. A. 7th Cir.) 86 F. 646.

454,214 Life guard for street cars, T. L. Johnson, June 16, 1891, valid, infringed (C. C., E. D. N. Y.) 75 F. 668.

454,497 Stalk splitting machine for whips, T. W. Reed, June 23, 1891, void (C. C., D. Mass.) 71 F. 299.

454,638 Water wheel bucket, W. G. Dodd, June 23, 1891, not infringed (C. C., N. D. Cal.) 142 F. 520.

454,803 Barrel hooping machine, L. D. Morrison, June 23,1891, held to infringe 439142 (C C., N. D. N. Y.) 62 F. 928.

454,845 Typewriting machine, B. A. Brooks, June 30, 1891, claims 5 to 9 void or not infringed (C C., D. N. J.) 95 F. 140; not infringed (C. C. A. 3rd Cir.) 109 F. 85.

455,374 Brick making machine, B. C. White, July 7, 1891, claims 17 and 23 void (C. C., D. Ind.) 115 F. 738; claim 17 not infringed, claim 23 void (C. C. A. 7th Cir.) 123 F. 427.

455,695 Door hanger, W. J. Sumner, July 7, 1891, void (C. C., S. D. N. Y.) 80 F. 915.

455,771 Truss, Smith & Smith, July 14,1891, valid, infringed (C.C., D. Vt.) 70 F. 238.

455,993 Lifting jack, J. Barrett, July 14, 1891, infringed (C. C., W. D. Pa.) 57 F. 748; (C. C., W. D. Pa.) 78 F. 626; (C. C. A. 3rd Cir.) 81 F. 865; (C. C., D. Mass.) 92 F. 921; valid, infringed (C. C., W. D. Mich., S. D.) 94 F. 154; (C. C., D. Mass.) 96 F. 986; (C.C., W. D. Mich., S. D.) 102 F. 171; (C. C. A. 6th Cir.) 109 F. 1057.

455,994 Lifting jack, J. Barrett, July 14, 1891, infringed (C. C., W. D. Pa.) 57 F. 748; valid, infringed (C. C., W. D. Mich., S. D.) 102 F. 171; (C. C. A. 6th Cir) 109 F. 1057.

455,995 Lifting jack, J. Barrett, July 14, 1891, valid, infringed (C. C., W. D. Mich., S. D.) 102 F. 171; (C. C. A. 6th Cir.) 109 F. 1057.

456,062 Bell, E. D. Rockwell, July 14, 1891, not infringed (C C., D. Conn) 64 F. 859; validity questioned, not infringed (C. C., D. N. J) 69 F. 152

456,117 See Reissue 11260.

456.122 Controlling device for elevator, G. H. Reynolds, July 14, 1891, claims 1 and 2 void (C C., E D. Pa) 68 F. 665; void (C. C. A. 3rd Cir.) 71 F. 876; valid, infringed (C. C. A. 7th Cir.) 76 F. 767.

456,202 Fireproof building, W. Orr. July 21, 1891, void (C. C., E. D. Pa) 96 F.216; not infringed (C.C.A. 3rd Cir) 101 F.460.

456,239 Baling press, E. C. Sooy, July 21, 1891, not infringed (C. C. A. 8th Cir.) 81 F. 726.

456,661 Steam pipe covering, C. J. W. Shearer, July 28, 1891, void (C. C., E. D. N. Y.) 105 F. 68.

456,704 Valve reseating machine, C. L. Morse, July 28, 1891, held not to infringe 400989 (C. C., D. Minn., 4th Div.) 62 F. 275.

456,720 Fishing boat attachment, P. Costa, July 28, 1891, valid, infringed (C. C , N. D Cal.) 62 F. 287.

456,722 Band pulley, W. H Dodge, July 28, 1891, void (C. C., D. Ky.) 101 F. 584.

456,825 Sheaf carrier and dumper for harvester, G. H. Howe, July 28, 1891, not infringed (C. C., N D Ill) 66 F. 547.

457,844 Device for controlling elevators, W. H Wells, 4 App. D. C. 44.

457,845 Device for controlling elevators, W. H. Wells, Jr., 4 App. D. C. 44.

457,905 Railway switch, A. A. Strom, Aug. 18, 1891, not infringed (C. C. A. 7th Cir.) 118 F. 733.

458,194 Centrifugal milk testing apparatus, D. T. Sharples, Aug.25, 1891, valid, infringed (C. C., D. Vt.) 75 F. 595 ; not infringed (C. C A. 2nd Cir.) 81 F 179.

458,252 Machine for trimming carriage tops, W. B. Quimby, Aug. 25, 1891, held to infringe 378457 (C. C., D. Mass.) 62 F. 269; (C. C. A. 1st Cir) 66 F. 1007.

458,357 Door check and closer, E. I. Blount, Aug. 25, 1891 claims 1 and 4 valid, not infringed, claims 2 and 3 valid, infringed, claim 5 void (C. C., E. D. N. Y.) 66 F. 761; valid, infringed (C. C. A. 2nd Cir.) 75 F. 674.

458,917 Controlling device for elevators, G. H. Reynolds, Sept. 1, 1891, claims 2 and 3 void (C. C., E. D. Pa.) 68 F. 665; void (C. C. A. 3rd Cir.) 71 F. 876.

458,995 Bath tub, G Booth, Sept. 8, 1891, valid, infringed (C.C., S. D. N. Y.) 77 F. 736; claim 1 void (C. C. A. 2nd Cir.) 80 F. 904; void (C. C. A. 2nd Cir.) 81 F. 868.

459,036 Sewing machine, C. Dancel, Sept. 8, 1891, 119 F. 692.

459,098 Road cart, H. J. Miller, Sept. 8, 1891, claims 1 and 2 not infringed, claims 7, 8, 9 and 10 void (C. C., S. D. N. Y.) 62 F. 923; not infringed (C. C. A. 2nd Cir.) 73 F. 682

459,706 See Reissue 11395.

460,262 Process for hardening armor plate, H. A. Harvey, 38 Ct. of Cls. 662; 39 Ct. of Cls. 297.

460,426 Drawbar and spring, F. E. Canda, Sept. 29, 1891, validity questioned, not infringed (C. C., E. D. Mich., S. D.) 123 F. 95; valid, infringed (C. C. A. 6th Cir.) 124 F. 486.

460,615 Electric rail connection, M. J. Wightman, Oct. 6, 1891 claims 8 and 9 void (C. C., S. D. N. Y.) 123 F. 311.

460,709 Curling iron, G. L. Thompson, Oct. 6, 1891, void (C. C., S. D. N. Y.) 60 F. 91; (C. C. A. 2nd Cir.) 67 F. 1021.

461.219 Vapor burner, Jeavons & Lannert, Oct. 13, 1891, not infringed (C. C , E. D. Mich., S. D.) 131 F. 740.

461.357 Circular knitting machine, Mayo & Mayo, Oct. 13, 1891, claims 4 and 6 not infringed, claim 11 void (C. C., D. R. I.) 121 F. 110; (C C. A. 1st Cir.) 133 F. 527.

461,415 Lawn sprinkler, T. C. Bonnette, Oct. 20, 1891, valid, infringed (C. C. A. 6th Cir.) 82 F. 428.

461,662 Car truck for electric motor, G. M. Brill, Oct. 20, 1891, valid, infringed (C. C., E. D. Pa) 109 F. 901

461,734 Water closet, A. G. Chadbourne, Oct. 20, 1891, valid, infringed (C C , D. Mass.) 136 F. 863; not infringed (C. C. A. 1st Cir.) 144 F. 103.

461,787 General index for books, M. H. Watson, Oct. 20, 1891, valid, infringed (C. C., W. D. Pa.) 60 F. 618.

461,793 Method of forming chain stitch, H. Briggs, Oct. 20, 1891, held infringed on application for preliminary injunction C. C. A. 1st Cir.) 132 F. 976.

461,822 Workmen's time recorder, J. C. English, Oct. 27, 1891, held not to infringe 482293 (C. C. A. 2nd Cir.) 64 F. 851.

461,911 Lead pencil, F. E. Blaisdell, Oct. 27, 1891, valid, not infringed (C. C., S. D. N. Y.) 86 F 134.

462,065 Numbering hand stamp, W. W. Sawyer, Oct. 27, 1891, infringed (C.C., E.D.N.Y.) 111 F. 902; not infringed (C.C., E.D. N.Y.) 124 F.72; valid (C.C.A.2nd Cir.) 143 F. 894.

462,224 Street letter box, S. Strong, Oct. 27, 1891, not infringed (Sup. Ct.) 163 U S. 49.

462,278 Steam joint packing, E. L. Perry, Nov. 3, 1891, void (C.C., D. Mass.) 86 F. 633; (C. C. A. 1st Cir.) 103 F. 314.

462,413 Car coupling, C. A. Pooley, Nov. 3, 1891, infringes 254106, 70 F. 622.

462,473 Garment hook, F. E. De Long, Nov. 3. 1891, valid, infringed (C. C., W. D. Pa.) 72 F. 525; not infringed (C. C. A. 3rd Cir.) 76 F. 976.

462,563 Knitted gloves, I W. Lamb, Nov. 3, 1891, valid, infringed (C. C. A. 6th Cir.) 120 F. 267.

462,954 See Reissue 11383.

462.973 Brush holder for dynamos, Thomson & Wakefield, Nov. 10, 1891, void (C. C., D. N. J.) 104 F. 816.

463,307 Steam generator, T. F. Morrin, Nov. 17, 1891, valid, infringed (C. C., E. D. N. Y.) 90 F. 285; claim 1 void, claim 2 valid, infringed (C. C. A. 2nd Cir.) 99 F.977; infringed (C. C., E. D. N. Y.) 138 F. 68; valid, infringed (C. C. A. 2nd Cir.) 143 F. 519.

463,308 Sectional casing for steam generator, T. F. Morrin, Nov. 17, 1891, valid, infringed (C. C., E. D., N. Y.) 90 F. 285; (C. C. A. 2nd Cir.) 99 F. 977.

463,569 Combined telegraph and telephone, E. Berliner, Nov. 17, 1891, void, canceled (C. C., D. Mass) 65 F. 86; not void (C. C. A. 1st Cir.) 68 F. 542; void (C. C., D. Mass.) 109 F. 976; not infringed (C. C. A. 1st Cir.) 119 F. 893; not invalid (Sup. Ct. U. S.) 1897 C D 442.

463,599 Wagon jack, C. Emons, Nov. 17, 1891, void (C. C., W. D. N. Y.) 106 F. 183; (C. C. A. 2nd Cir.) 115 F. 493.

463 629 See Reissue 11601.

463,704 Electric motor and dynamo, A. L. Parcelle, Nov. 24, 1891, void (C. C., S. D. O., W. D) 146 F. 552.

464,029 Flat grinding device for carding engine, Knowles & Tatham, Dec. 1 1891, not infringed (C. C., D. Mass.) 114 F. 497; infringed (C. C. A. 1st Cir.) 122 F. 632.

464,247 Electric heating apparatus, M. W. Dewey, Dec. 1, 1891, infringed (C. C , N. D. N. Y.) 78 F. 483; void (C. C. A. 2nd Cir.) 81 F. 860.

464,524 Folding bed, C T. Segar, Dec.8, 1891, void (C.C., D.Mass.) 122 F. 811.

464,883 Cartridge loading machine, G. Ligowsky, Dec. 8th, 1891, priority sustained (C. C. A. 6th Cir.) 77 F. 630.

464,933 Process of reducing aluminum ores, C. S. Bradley, Dec. 8, 1891, not infringed (C. C . W. D. N. Y. (111 F. 742; (C. C. A. 2nd Cir.) 125 F. 926.

465,255 Recording computing machine, D. E. Felt, Dec 15, 1891, not infringed (C. C., D. R. I.) 140 F. 136; valid and infringed (C. C. A. 1st Cir.) 145 F. 331.

465,407 Electric railway, G. F. Green, Dec. 15. 1891, not infringed (C. C , S. D. Ohio, W. D.) 81 F. 617; void or not infringed (C. C. A. 6th Cir.) 92 F. 614.

465,432 Electric railway, G. F. Green, Dec. 15, 1891, not infringed (C. C., S. D. Ohio, W. D.) 81 F. 617; void or not infringed (C. C. A. 6th Cir.) 92 F. 614.

465,485 Business system, L. Maybaum, Dec. 22, 1891, void (C. C., N. D. Ill.) 51 F. 751; (C. C., S. D. N. Y.) 53 F. 818; (C. C. A. 2nd Cir.) 59 F. 139.

465,615 See Reissue 11324.

465,771 Molds for tubular articles, S. J. Adams, Dec. 22, 1891, not infringed (C. C. A. 3rd Cir.) 76 F. 800.

465,911 Gas stove, T. W. Ballard, Dec. 29, 1891, valid, infringed (C. C., W. D. Pa.) 102 F. 346, 348; void or not infringed (C. C. A. 3rd Cir.) 102 F. 349

465,967 Store service apparatus, R. A. McCarty, Dec. 29, 1891, infringed (C. C. A. 7th Cir.) 123 F. 416.

466,532—469,395 **1892**

466,532 Rubber wheel tire, W. E. Bartlett, Jan. 5, 1892, void or not infringed (C. C., S. D. N. Y.) 85 F. 451.

466,563 Bale tie, J. W. Griswold. Jan. 5, 1892, held to infringe 372-375 (C. C., N. D. N. Y.) 62 F. 119.

466,940 Curtain rod, Fowler & Lingley, Jan. 12, 1892, valid, infringed (C. C. A. 2nd Cir.) 61 F. 821.

466,984 Brake beam, H. B. Robischung, Jan. 12, 1892, not infringed (C. C., E. D. Mo., E. D.) 99 F. 758; (C. C. A. 8th Cir.) 106 F. 693.

467,249 Car coupling, T. H. Gilbert, infringes 254106, 70 F. 622.

467,466 Vapor burner, W. R. Jeavons, Jan. 19, 1892, not infringed (C. C., E. D. Mich., S. D.) 131 F. 740.

467,476 Straw elevator for thrashing machine, J. Buchanan, Jan. 19, 1892, infringed (C. C., D. Ind.) 57 F. 1039.

467,650 Apparatus for laying conduits for wires, H. B. Camp, Jan. 26, 1892, valid, infringed (C C., N. D. Ohio, W. D.) 88 F. 485.

468,006 Boot tree, G. H. Stephens, Feb 2, 1892, valid, not infringed (C. C., E. D. N. Y) 132 F. 659.

468,077 Music desk for piano, T. P. Brown, Feb. 2, 1892, valid, infringed (C. C., D. Conn.) 131 F. 273; (C. C. A. 2nd Cir.) 134 F. 735.

468,144 Thimble and bushing for barrels, Anthony & Savage, Feb. 2, 1892, claim 4 void (C. C. A. 9th Cir.) 117 F. 295.

468,148 Process for separating aluminum, C. S. Bradley, Feb 2,1892, not infringed (C. C., W. D. N. Y.) 111 F. 742; valid, infringed (C. C. A. 2nd Cir.) 125 F. 926.

468,258 Bottle sealing device, W. Painter, Feb. 2, 1892, infringed (C. C., D. Md.) 123 F. 669; valid, infringed (C. C , S.D. N. Y.) 136 F. 199 ; void (C. C. A. 2nd Cir.) 136 F. 841; valid, not infringed (C. C. A. 4th Cir.) 139 F. 312.

468,303 Band saw mill, C. J. Koefoed, Feb. 2, 1892, held to infringe 442645 (C. C., N. D. Cal.) 57 F. 934; held not to infringe 442645 (C. C. A. 9th Cir.) 62 F. 444.

468,331 Breech loading ordnance, R. B. Dashiell, Feb. 9, 1892, held to infringe 425584 (C. C., D. Md) 62 F. 584; held to not infringe 425584 (Sup. Ct. U. S.) 1896 C.D. 329; 162 U.S. 425; 36 Ct. of Cls. 115.

468,720 Sign letters for attachment to glass, J. E. Barrett, Feb. 9, 1892, not infringed (C. C. A. 6th Cir;) 127 F. 138.

469,302 See Reissue 11443.

469,372 Cloth pressing machine, D. Gessner, Feb. 23, 1892, infring- (C C., N. D. N. Y.) 63 F. 961.

469,395 Method of making flags, H. A. Bowman, Feb. 23, 1892, void (C. C., S. D. N. Y.) 60 F. 907.

469,809 System of electrical distribution, W. Stanley, Mar. 1, 1892, valid, infringed (C C , N. D. N. Y;) 108 F. 221; (C.C.A. 2nd Cir.) 113 F. 884; not infringed (C. C , D. Mass) 117 F. 309; (C. C., S D. N. Y) 119 F. 365; infringed (C.C., N. D. N. Y.) 131 F. 86; infringement not established (C. C. A. 2nd Cir.) 139 F. 868.

470,269 Cigarette machine, J. B. Underwood, Mar. 8, 1892, held to infringe 184207 and 216164, held to not infringe 238640 (C. C., E. D. N. C.) 73 F. 206.

470,340 Movable coil for electrical measuring instruments, E. Weston, Mar. 8, 1892, valid, infringed (C.C., S. D. N.Y.) 119 F. 181; void (C. C. A. 2nd Cir) 134 F. 574.

470,591 Feed mechanism for screw cutting lathe, W. P. Norton, Mar. 8, 1892, not infringed (C. C., S. D N. Y.) 113 F. 592.

470,644 Converter for copper ore, P. Manhes, Mar. 8, 1892, void (C. C., S. D. N. Y.) 121 F 551.

470,817 Electric railway motor. F. O. Blackwell, Mar. 15, 1892, void (C. C , D. Mass.) 83 F. 203.

471,063 Electric elevator, R. C. Smith, Mar. 15, 1892, does not anticipate 478344 (C. C., D. N. J.) 141 F. 101.

471,264 Ore roasting furnace, H. F. Brown, Mar. 22, 1892, valid, infringed (C. C A. 8th Cir.) 104 F. 345; not infringed (C. C., D. Wash., N. D.) 110 F. 383; infringed (C. C., D. Wash., N D.) 110 F. 383; claim 4 void (C. C. A. 8th Cir.) 110 F. 665; valid, infringed (C. C. A. 8th Cir.) 115 F 150; (C. C A. 8th Cir) 119 F. 918; not infringed (C. C. A. 8th Cir.) 129 F. 912.

471,769 Brick kiln, J C. Kinsel, Mar. 29, 1892, not infringed (C. C. A 6th Cir.) 67 F. 926.

471,772 Fireproof floor and ceiling, W. Orr, Mar. 29, 1892, not infringed (C. C , W D N. Y.) 131 F. 265.

471,974 Milk cooler, Heulings & Evans, Mar. 29, 1892, claims 6 and 7 void (C. C , E. D. Pa.) 58 F. 868.

471,982 Bicycle bell, E. D. Rockwell, Mar. 29, 1892, infringed (C. C., D. Conn) 64 F. 859; void (C.C , D. N. J.) 69 F.152; void (C. C. A 2nd Cir.) 73 F. 469.

471,983 Door bell, E. D Rockwell, Mar. 29, 1892, not infringed (C. C., D. Conn.) 64 F. 859; void (C. C., D. Conn.) 118 F. 41; (C. C. A. 2nd Cir.) 127 F. 152.

472,094 Overseam sewing machine, Wilcox & Borton, Apr. 5, 1892, not infringed (C. C., D. Conn.) 83 F. 179; valid, infringed (C. C. A. 2nd Cir) 93 F. 206, 215.

472,095 Overseam sewing machine, Wilcox & Borton, Apr. 5, 1892, not infringed (C. C., D. Conn.) 83 F. 179; claim 2 void (C. C. A. 2nd Cir.) 93 F. 206.

472,124 Electric recording device for compasses, C. L. Jaeger, 58 F. 1006.

472,230 Process of decorating glass, J. H. Scharling, Apr. 5, 1892, infringed (C C.. D. N. J) 100 F. 87.

472,284 Can heading machine, B. Adriance, Apr. 5, 1892, held to not infringe 281508 (C. C., D. N. J.) 69 F. 344; (C. C. A.3rd Cir.) 92 F. 369.

472,399 Sole trimming machine, S. Ross, Apr. 5, 1892, held to infringe 407735 (C. C., N. D. N. Y.) 55 F. 62.

472,495 Pneumatic tool. D. Drawbaugh, Apr. 5, 1892 held to infringe 364081 (C. C., S D N. Y.) 69 F. 331; (C.C.A 2nd Cir.) 71 F. 523.

472,555 Under-garments, J. A. Schriven, Apr 12, 1892, not infringed (C C., D. Md.) 124 F. 894; (C. C. A. 4th Cir.) 134 F. 366.

472,607 Device for feeding seed cotton to gins, S. D. Murray, Apr. 12, 1892, validity questioned, not infringed (C.C., D.Del.) 141 F. 126

472.689 Combination cock, W. C. Baker, Apr. 12, 1892, valid, infringed (C C. A. 7th Cir) 125 F. 1; (C C., N. D. Ill.) Baker v. Crane Co., decided July 31, 1902, not reported.

473 019 Corrugating machine, W. J. Plecker, Apr. 19, 1892, (C. C., S D. Ohio. W. D); Plecker v. Poorman, decided Apr-15, 1905, not reported

473,020 Method of corrugating pipes, W. J. Plecker, Apr. 19, 1892, void (C C , S. D. Ohio, W. D.); Plecker v. Poorman, decided Apr. 25. 1901, not reported.

473,087 Plane iron, E. Schade, Apr. 19, 1892 void (C. C , N. D N. Y.) 115 F. 813; not infringed (C C. A. 2nd Cir.) 125 F. 947.

473,182 Packing rings for pistons, Tripold & Davenport, Apr. 19, 1892, valid, infringed (C. C., E. D. N. Y.) 120 F. 301.

473.338 Automatic governor for pneumatic motor, W. D. Parker, Apr. 19, 1892, plea of laches sustained (C. C., E. D. Pa.) 139 F. 46.

473,544 Proportional gas meter, F. E Youngs, Apr. 26, 1892, not infringed (C. C. A. 3rd Cir.) 109 F. 644.

473,563 Shuttle carrier for swivel loom, A. Wagner, Apr. 26, 1892, not infringed (C. C., E. D. Pa.) 124 F. 320.

474,158 Air brush, C. L. Burdick, May 3, 1892. valid and infringed (C. C., N. D. Ill., E. D.) 142 F. 776.

474,496 Apparatus for molding earthenware, J. Crossley, May 10, 1892, void (C. C., D. N. J.) 71 F. 967; 79 F. 992.

474,520 Music box, S. Cuendet, May 10, 1892, not infringed (C. C., S. D. N. Y.) 97 F. 617.

474,548 Swaging machine, W. H. Dayton, May 10, 1892, void (C.C., D. Conn.) 97 F. 627; (C. C. A. 2nd Cir.) 101 F. 448.

474,718 Railway torpedo, J. H. Bevington, May 10, 1892, void (C. C. A. 7th Cir.) 138 F. 729.

474,811 Baking powder, C. A. Catlin, May 17, 1892, void (C. C., S. D. N. Y.) 125 F. 231; valid, infringed (C. C. A. 2nd Cir.) 134 F. 385; not infringed within jurisdiction (C. C., S. D. N. Y.) 145 F. 953.

474,997 Hammock valance, I. E. Palmer, May 17, 1892, not infringed (C. C., S. D. N. Y.) 90 F. 281.

475,401 Oil burner, W. R. Jeavons, May 24, 1892, claims 1 and 5 void (C. C , E. D. Mich., S. D.) 131 F. 740.

475,929 Non metallic bearing, W. T. Carroll, May 31, 1892, infringed (C. C., D. Mass.) 141 F. 992.

476,038 Crayon machine, Cowdery, Curtis & Liedke, May 31, 1892, valid, infringed (C. C. A. 6th Cir.) 139 F. 564.

476,051 Crayon machine, C. H. Liedke, May 31, 1892, valid, not infringed (C. C. A. 6th Cir.) 139 F. 564.

476,506 Wick raiser for lantern, F. K. Wright, June 7, 1892, not infringed (C. C., E. D. Pa) 132 F. 30; (C. C. A. 3rd Cir.) 134 F. 866.

477,174 Lug for tank hoop coupling, Ford & Ferguson, 5 App. D.C. 26.

477,195 Trussing machine for tubs, barrels, etc., Glader & Schmidt, June 14, 1892, held to not infringe 294764 (C. C. A. 7th Cir.) 80 F. 293.

477,517 Book typewriting machine, J. M. Crary, June 21,1892, valid, not infringed (C. C., S. D. N. Y.) 106 F. 507; (C. C. A. 2nd Cir.) 108 F 628.

477,584 Can heading machine. M. A Wheaton, June 21, 1892, held to not infringe 267014 (C. C. A. 9th Cir.) 70 F. 833; (C. C. A. 9th Cir.) 79 F. 793; held to not infringe 307197 (C. C., N. D. Cal.) 97 F. 636.

477,616 Electric annunciator drop, J. C. Warner, June 21,1892, claim 1 void, claim 4 not infringed (C.C A.6th Cir) 130 F. 457.

477,865 Wick adjuster for central draft lamp, W. C Homan. June 28, 1892, void or not infringed (C.C., D.Conn.) 80 F.523.

477,917 See Reissue 11371.

478,168 Casket handle, J. McCarthy, July 5, 1892, not infringed (C. C., D Conn.) 124 F. 897; (C. C. A. 2nd Cir.) 129 F. 128.

478,218 Street car truck, G. M. Brill, July 5, 1892, claims 1, 2, 9, 10, 11. 12, 14 and 27 valid, infringed, claim 17 void (C. C., S. D. N. Y.) 103 F. 289; 105 F. 626; not infringed (C.C. A. 2nd Cir.) 108 F. 267; 110 F. 377.

478,344 System of electrical distribution, H. W. Leonard, July 5, 1892, valid, claims 1, 2, 4, 8 and 9 infringed (C. C., D.N. J.) 141 F. 101.

478,461 See Reissue 11411.

478,503 Printing press, J. L. Cox, July 5, 1892, held to infringe 291-521 and 376053 (C. C., D. Mass.) 64 F. 782; held to not infringe 291521 and 376053 (C. C. A. 6th Cir.) 101 F.282.

479,339 Exercising keyboard for musicians, A. K. Virgil, July 19, 1892, valid, infringed (C. C., S. D. N. Y.) 138 F. 897.

479,678 Water tube boiler, A. Stirling, July 26, 1892, not infringed (C. C., W. D. Pa.) 72 F. 780.

479,864 Moving stairway, G. A. Wheeler, Aug. 2, 1892, valid, claims 6 and 10 infringed, claims 7, 11 and 12 not infringed (C. C., S. D. N. Y.) 145 F. 532.

479,973 Refrigerator door packing, R. G. Chase, 8 App. D. C.

480,093 Band shell for wheel hubs, H. Higgin, Aug. 2, 1892, valid (C. C. A. 6th Cir.) 100 F. 459; void (C. C. A. 6th Cir.) 132 F. 810.

480,157 Winding machine, S. W. Wardwell, Aug. 2, 1892, claims 1, 2 and 3 not infringed, claim 4 void or not infringed (C. C., D. Conn.) 82 F. 228; not infringed (C. C. A. 2nd Cir.) 92 F. 391.

480,158 Method of winding cops, S. W. Wardwell, Aug. 2, 1892, void (C. C., D. Conn.) 82 F. 228; (C. C. A. 2nd Cir.) 92 F. 391.

480,194 Brake beam, P. Hein, Aug. 2, 1892, claims 1, 2, 3, 4 and 7 void, claims 5, 6 and 8 not infringed (C. C., E. D. Mo., E. D.) 99 F. 758; claims 1, 5 and 7 void, claims 3, 4, 5, 6 and 8 not infringed (C. C. A. 8th Cir.) 106 F. 693.

480,247 Tip for flexible gas tubing, A. Caldwell, Aug. 9, 1892, void (C. C., S. D. N. Y.) 70 F. 1009.

480,304 Corn planter, L. E. Waterman, Aug. 9, 1892, valid, infringed (C. C. A. 7th Cir.) 84 F. 171.

480,536 Fastening for table legs, L. Welker, Aug. 9, 1892, not infringed (C. C., W. D. Pa.) 73 F. 299.

480,555 Pan or other vessel, T. D. Brown, Aug. 9, 1892, valid, infringed (C. C., N. D. N. Y.) 81 F. 48.

481,134 Valve for air brakes, G. A. Boyden, Aug. 16, 1892, held to not infringe 360070 (C.C.A. 4th Cir.) 70 F. 816; infringed (C. C., S. D. N. Y.) 113 F. 594; valid, infringed (C. C., S. D. N. Y.) 123 F. 306; (C. C. A. 2nd Cir.) 128 F. 437; (C. C. A. 2nd Cir.) 130 F. 144; 135 F. 774.

481,135 Valve for air brakes, G. A. Boyden, Aug. 16, 1892, held to infringe claim 2 but not to infringe claims 1 and 4 of 360070 (C. C., D. Md.) 66 F. 997; held to not infringe 360070 (C. C. A. 4th Cir.) 70 F. 816.

481,436 Valve for air brakes, G. A. Boyden, Aug. 16, 1892, held to infringe claim 2 but not to infringe claims 1 and 4 of 360070 (C. C., D. Md.) 66 F. 997; held to not infringe 360070 (C. C. A. 4th Cir.) 70 F. 816.

481,359 Massage apparatus, A. Kahn, Aug. 23, 1892, demurrer sustained with leave to amend (C.C., S.D.N.Y.) 145 F. 197.

481,636 Well boring apparatus, D. L. Monroe, Aug. 30, 1892, not infringed (C. C., S. D. Iowa, E. D.) 81 F. 954.

481,856 Stove pipe, T. S. Evans, Aug. 30, 1892, not void on demurrer (C. C. A. 8th Cir.) 140 F. 254.

481,981 Drainer plate, H. Strater, Sept. 6, 1882, void (C. C., D. Mass.) 69 F. 619.

482,293 Workmen's time recorder, W. L. Bundy, Sept. 6, 1892, not infringed (C. C., S. D. N. Y.) 59 F. 293; (C. C. A. 2nd Cir.) 64 F. 851.

482,484 Machine for forming channel strips for baskets, J. G. Lettelier, Sept. 13, 1892, void (C. C., S. D. Cal.) 91 F. 909.

482,557 Metallic casket, F. H. Hill, Sept. 13, 1892, not infringed (C. C., N. D. Ill.) 89 F. 340.

482,931 Sheaf carrier for self-binding harvester, J. F. Steward, Sept. 20, 1892, held not to infringe 456825 (C. C., N. D. Ill.) 66 F. 547.

482,965 Machine for making and inserting coil shaped fasteners, C. Jackson, Sept. 20, 1892, valid, not infringed (C.C., E.D. Pa.) 120 F. 289.

483,020 Machine for embedding wire netting in glass, F. Shuman, Sept. 20, 1892, valid, infringed (C. C. A. 7th Cir.) 97 F. 950.

483,021 Process of embedding wire netting in glass, F. Shuman, Sept. 20, 1892, valid, infringed (C. C. A. 7th Cir.) 97 F. 950.

483,033 Hermetically sealed jar, A. Weissenthanner, Sept. 20, 1892, not infringed (C. C., S. D. N. Y.) 146 F. 387; (C. C., S. D. N. Y.) Phoenix Cap Co. v. S. Reiss et al., decided Dec. 1, 1905, not reported.

483,166 Friction match book, J. Pusey, Sept. 27, 1892, valid, infringed (C. C., E. D. Pa.) 71 F. 521; (C. C. A. 3rd Cir.) 77 F. 208.

483,646 Artificial mica sheets, A. H. S. Dyer, Oct. 4, 1892, valid and infringed (C. C., D. N. J.) 137 F. 928.

483,653 Molding mica forms or insulators, C. W. Jefferson, Oct. 4, 1892, void (C. C., D. N. J.) 137 F. 928.

483,781 Malt kiln floor, F. B. Giesler, Oct. 4, 1892, held not to infringe 226890 (C. C., E. D. Wis.) 67 F. 134.

484,584 Phonograph reproducer, T. A. Edison, Oct. 18, 1892, not infringed (C. C., E. D. N. Y.) 117 F. 149.

484,685 Centrifugal milk tester, R. Stoddard, Oct. 18, 1892, held to infringe 458194 (C. C., D. Vt.) 75 F. 595; held to not infringe 458194 (C. C. A. 2nd Cir.) 81 F. 179.

485,478 Incandescent electric lamp, E. Pollard, infringes 223898, 62 F. 397.

485,542 Tubular bell, J. Harrington, Nov. 1, 1892, not infringed (C. C., S. D. N. Y.) 118 F. 853.

485,713 Toy animal, W. P. Shattuck, Nov. 8, 1892, held to infringe 213642 (C. C., S. D. N. Y.) 106 F. 735.

1892 (Concluded)

485,856 Thill coupling, C. C. Bradley, Nov. 8, 1892, valid, infringed (C. C., N. D. N. Y.) 138 F. 916; void (C. C. A. 2nd Cir.) 143 F. 521.

486,113 Advertising cabinet, D. B. Lincoln, Nov. 15, 1892, void (C. C. A. 7th Cir.) 89 F. 308.

486,200 Transplanter, Starks & Felland, Nov. 15, 1892, not infringed (C. C., N. D. N. Y.) 59 F. 157; (C. C. A. 7th Cir.) 121 F. 85.

486,218 Brake beam, H. B. Robischung, Nov. 15, 1892, valid, not infringed (C. C., E. D. Mo., E. D.) 99 F. 777; not infringed (C. C. A. 8th Cir.) 106 F. 693.

486,610 Valve indicator, J. Giles, Nov. 22, 1892, held to not infringe 404844 (C. C., D. Mass.) 75 F. 277.

486,663 Computing scale, J. W. Culmer, Nov. 22, 1892, not infringed (C. C., W. D. Pa.) 88 F. 788; (C. C. A. 3rd Cir.) 101 F. 837; (C. C. A. 6th Cir.) 126 F. 639.

486,745 Cop, S. D. Wardwell, Nov. 22, 1892, void (C. C., D. Conn.) 82 F. 228; (C. C. A. 2nd Cir.) 92 F. 391.

488,033 Spring jack switch, Scribner & Warner, Dec. 13, 1892, valid, infringed (C. C. A. 6th Cir.) 135 F. 79; limited by foreign patent (C. C., N. D. Ohio, E. D.); Western Electric Co. v. The North Electric Co., decided Feb. 1905, not reported.

488,179 Trolley stand for electric cars, E. M. Bentley, Dec. 20, 1892, not infringed (C. C., W. D. Pa.) 141 F. 124.

488,446 Cotton gin feeder, S. D. Murray, Dec. 20, 1892, (C. C., D. Del.) 141 F. 126.

488,494 Pneumatic tire, Brown & Stillman, Dec. 20, 1892, valid, infringed (C. C., W. D. Pa.) 66 F. 558; not infringed (C. C. A. 3rd Cir.) 70 F. 58.

488,622 Brick machine, B. C. White, Dec. 27, 1892, claims 16, 19 and 20 void (C. C., D. Ind.) 115 F. 738; (C. C. A. 7th Cir.) 123 F. 427.

488,630 Celluloid book cover, A. C. Hafely, Dec. 27, 1892, valid, infringed (C. C., D. Md.) 68 F. 428.

1893

489,682 Electric lamp socket, A. Metzger, Jan. 10, 1893, claims 5 and 6 valid and infringed, claim 7 void (C. C., N. D. N. Y.) 146 F. 539.

489,714 Pneumatic tire, J. F. Palmer, Jan. 10, 1893, held to anticipate 493220 (C. C. A. 6th Cir.) 90 F. 732.

489,767 Fire extinguisher, O. A. Stempel, Jan. 10, 1893, not infringed (C. C., E. D. Mo., E. D.) 75 F. 583.

490,105 Churn and butter worker, R. B. Disbrow, Jan. 17, 1893, infringed (C. C., D. Minn.) 94 F. 519.

490,738 Adjustable stop device for hay carriers, J. H. Burkholder, Jan.31,1893, not infringed (C. C., W. D. Wis.) 141 F. 975.

490,849 Ore concentrator, G. Johnston, Jan. 31, 1893, void (C.C., N. D. Cal.) 96 F. 421; (C. C. A. 9th Cir.) 109 F. 567.

491,012 Bicycle bell, L. E. Ericson, Jan. 31, 1893, not infringed (C. C., D. Mass.) 96 F. 229; (C. C. A. 1st Cir.) 98 F. 892; valid, infringed (C. C., D. Mass.) 116 F. 488; (C. C., D. Mass.) 128 F. 55; (C. C. A. 1st Cir.) 135 F. 95.

491,091 Boiler supporting lug, G. H. Drake, Feb. 7, 1893, void (C. C. A. 6th Cir.) 123 F. 86.

491,113 Bottle stopper, K. Hutter, Feb. 7, 1893, valid, infringed (C. C., D. N. J.) 114 F. 655; (C.C., S. D. N. Y.) 119 F.190; (C. C. A. 2nd Cir.) 128 F. 283; (C. C., S. D. N. Y.) 137 F. 92.

491,640 Inkstand, E. Davis, Feb. 14, 1893, not infringed (C. C., E. D. N. Y.) 115 F. 333.

491,972 Process of making coloring-matter from logwood, P. T. Austen, Feb. 14, 1893, valid, infringed (C. C., S. D. N. Y.) 131 F. 483; (C. C. A. 2nd Cir.) 138 F. 54.

492,205 Machine for coating confectionery with chocolate, D. M. Holmes, Feb, 21, 1893, valid, infringed (C. C., S. D. N. Y.) 129 F. 919; not infringed by 634633 (C. C. A. 2nd Cir.) 142 F. 978.

492,576 Wire swaging machine, W. H. Dayton, Feb. 28,1893,claims 1, 2, 3, 4 and 6 void, claims 5, 8 and 9 valid, infringed (C. C., D. Conn.) 97 F. 627; (C. C. A. 2nd Cir.) 101 F. 448.

492,811 Trolley wire connector, W. S. Kisinger, Mar. 7, 1893, void (C. C. A. 6th Cir.) 97 F. 502.

492,913 Electric lamp lighter, J. C. Chambers, Mar. 7, 1893, not infringed (C. C. A 7th Cir.) 106 F. 509; void or not infringed (C. C., N. D. N. Y.) 124 F. 553; claim 1 void, claims 5 and 10 valid, infringed (C, C. A. 2nd Cir.) 130 F. 342.

492,927 Paper board, McEwan & McEwan, Mar. 7, 1893, valid, infringed (C. C,, D. Conn) 63 F. 570; (C. C., D. N. J.) 91 F. 787; not infringed (C. C. D. Ind.) 115 F. 328; infringed (C. C. A. 7th Cir.) 123 F. 431.

493,216 Hay carrier track, W. Lauden, Mar. 7, 1893, void (C.C., W. D. Wis.) 141 F. 975.

493,220 Elastic fabric, J. F. Palmer, Mar. 7, 1893, claims 1, 2 and 3 void (C. C., N. D. Ohio, E. D.) 84 F. 659; void (C. C. A. 6th Cir.) 90 F. 732.

493,234 Motor truck, Brill & Adams, Mar. 7, 1893, valid, infringed (C. C., E. D. Pa.) 109 F. 901.

493,434 Insulator pin, F. M. Locke, Mar. 14, 1893, void (C. C., D. Mass.) 143 F. 911; (C. C. A. 1st Cir.) 143 F. 985.

493,548 Stove damper, F. O. Farwell, Mar. 14, 1893, infringed (C. C., N. D. Ia., E. D.) 111 F. 182; not infringed (C.C. A. 8th Cir.) 117 F. 830.

493,595 Freight business system, J. B. Mockridge, Mar. 14, 1893, void (C. C., S. D. N, Y.) 117 F. 320; (C.C.A. 2nd Cir.) 122 F. 467.

493,621 Store service apparatus (J. H. Goodfellow, Mar. 14, 1893, valid, infringed (C. C., D. Vt.) 103 F. 311.

493,736 Car starter, J. Ripberger, Mar. 21, 1893, valid and infringed (C. C., N. D. Ill., E. D.) 145 F. 646.

494,113 Sulky, S. Elliott, Mar. 21, 1893, void (C. C., N. D. Ill., N. D.) 89 F. 202; (C. C. A. 7th Cir.) 100 F. 99.

494,245 Pyrometer, E. Brown, Mar. 28, 1893, valid, infringek (C.C., S. D. N. Y.) 105 F. 242.

494,395 Slate picker, S Thomas, Mar. 28, 1893, not infringed (C.C., M. D. Pa.) 122 F. 877.

494,917 Shell extractor for breech loading ordnance, Dashiell, 36 Ct. of Cls. 115.

494,960 Tobacco flavoring machine, J. M. King, Apr. 4, 1893, void (C. C., W. D. N. C.) 70 F. 859; not infringed (C. C. A. 4th Cir.) 78 F. 346.

494,999 Process of chipping glass, S. Evans, Apr. 4, 1893, void (C. C., N. D. Ill.) 81 F. 198; (C. C. A. 7th Cir.) 83 F. 706; (C.C.A. 7th Cir.) 86 F. 779; (C C.A. 7th Cir.) 118 F.575.

495,383 Electric railway trolley, C. J. Van Depoele, Apr. 11, 1893, claims 11, 12 and 13 void (C. C., D. Conn.) 71 F. 192; (C. C., S. D. N. Y) 87 F. 879.

495,443 Electric railway trolley, C. J. Van Depoele, Apr. 11, 1893, valid, infringed (C C., D. Conn) 71 F. 192; not infringed (C. C. A. 2nd Cir.) 75 F. 1005; infringed (C. C., N. D. Ohio, E. D.) 78 F. 139; (C. C., W. D. Pa,) 78 F.361; valid, infringed (C. C A 6th Cir.) 80 F. 712; claims 6, 7, 8, 12 and 16 void (C. C. A. 2nd Cir.) 82 F. 461; valid, infringed (C. C., S. D. N. Y.) 84 F, 888; claims 2 and 4 void (C. C. A. 2nd Cir.) 86 F. 636; void (C. C. A. 6th Cir.) 101 F; 121; claims 2, 4, 6. 7, 8, 12 and 16 void (C. C., S. D. N. Y.) 112 F. 534; preliminary injunction denied (C. C., S. D. Ohio, E. D) 144 F. 130; see Reissue 11872.

495,883 Ore roasting and calcining furnace, R. C. Greer, Apr. 18, 1893. valid, infringed (C. C., M. D. Pa) 128 F. 453; (C. C. A. 3rd Cir.) 131 F. 68.

495,944 Hay baling press, Livengood, Chadbourne & Gibbons, Apr. 18, 1893, infringed (C. C. A. 8th Cir.) 81 F. 726; claim 5 void or not infringed (C. C. A. 8th Cir.) 84 F. 463.

495,975 Pneumatic tire, R. W. Huss, Apr. 25, 1893, held to anticipate 539224 (C. C. A. 6th Cir.) 90 F. 732.

496,058 Safety valve, A. Lohbiller, Apr. 25, 1893, void (C. C. A. 1st Cir.) 94 F. 516.

496,157 Packing and shipping case, W. H. Haworth, Apr. 25, 1893, void (C. C., S. D. N. Y.) 88 F. 512.

496,449 Dynamo electric machine, Scribner & Warner, May, 2, 1893, not infringed (C. C., N. D. Ill., N. D.) 81 F. 192; (C.C. A. 7th Cir.) 84 F. 654.

496,971 Rim for bicycle wheels, Fairbanks & Berlo, May 9, 1893, valid, infringed (C. C., N. D. N. Y.) 78 F. 490.

497,038 Incandescent electric lamp, J. Waring, May 9, 1893, held to infringe 223898 (C. C., D. Conn.) 59 F. 358.

497,294 Ingrain cerpet fabric, S. J. Acheson, May 16, 1893, held to infringe 382157 (C. C., E. D. Pa.) 71 F. 887.

497,467 Lawn mower ratchet mechanism, F. T. Farmer, May 16, 1893, held to not infringe 383829 (C. C., D. Ind.) 76 F. 827.

497,482 Shunt for electric power stations, E. Weston, May 16, 1893, valid, infringed (C. C., S. D. N. Y.) 131 F. 82; plea to jurisdiction sustained (C. C., D. N. J.) 145 F. 534.

497,489 Circuit controller for railway signal device, J. P. Buchanan, May 16, 1893, valid, infringed (C. C., W. D. Pa.) 115 F. 638.

497,765 Shifting seat carriage, J. T. Clarkson, May 23, 1893, held not to infringe 300847 (C. C., D. Mass.) 58 F. 581.

497,864 Grain drill, Christman & Munn, May 23, 1893, held not to infringe 446230 (C. C., W. D. Ky.) 118 F. 143; held to infringe 446230 (C. C. A. 6th Cir.) 127 F. 143.

497,971 Pneumatic tire, P. W. Tillinghast, May 23, 1893, valid, infringed (C. C., D. Mass.) 98 F. 624; claim 1 void, claim 2 valid, infringed (C. C. A. 1st Cir.) 112 F. 423.

498,104 Tape measure case, F. Buck, May 23, 1893, held not to infringe 338602 (C. C., N. D. Ohio, E. D.) 74 F. 553.

498,196 Railroad swltch stand, A. A. Strom, May 23, 1893, valid, infringed (C. C., E. D. Pa.) 133 F. 730; 134 F. 889; not infringed (C. C. A. 3rd Cir.) 141 F. 95.

498,709 Sulky, S. Elliott, May 30, 1893, void (C. C., N. D. Ill., N. D.) 89 F. 202.

498,962 Draft tube for soda fountain, G. W. Sample, June 6, 1893, valid, infringed (C. C., E. D. Pa.) 126 F. 760; claims 1 and 5 void (C. C. A. 3rd Cir.) 130 F. 145; 134 F. 402.

499,151 Fuel gas mixer, W. G. Taylor, June 6, 1893, valid, infringed (C. C., W. D. Pa.) 72 F. 182.

499,206 Brick mold sanding machine, J. A. Buck, June 13, 1893, valid, infringed (C. C., S. D. N. Y.) 78 F. 487; (C. C. A. 2nd Cir.) 84 F. 887.

499,294 Cash register, C. A. Juengst, June 13, 1893, held to be entitled to priority over 398898 and 416029 (C.C., D. N.J.) 60 F. 603.

499,397 Process of gathering and hulling peas, R. P. Scott, June 13, 1893, valid, infringed (C. C., D. Del.) 106 F. 191; claim 2 void (C. C. A. 3rd Cir.) 115 F. 625.

499,402 Mop stick, T. W. Stewart, June 13, 1893, not infringed (C. C. A. 7th Cir.) 143 F. 126.

499,689 Aniline black resist, W. T. Whitehead, June 13, 1893, void (C. C., S. D. N. Y.) 107 F. 467.

499,769 Regulator for electric motor, G. H. Whittingham, June 20, 1893, valid, claims 4 and 5 infringed, claims 6, 7 and 8 not infringed (C. C., S. D. N. Y.) 139 F. 870.

499,949 Can heading machine, M. A. Wheaton, June 20,1893, held to not infringe 307197 (C. C., N. D. Cal.) 97 F. 636.

500,084 Manufacture of axles, J. Taylor, June 20, 1893, valid, infringed (C. C., N. D. Ohio, E. D.) 89 F. 713; (C. C. A. 6th Cir.) 97 F. 795.

500,151 Rib knitting machine, McMichael & Wildman, June 27, 1893, not infringed (C. C., E. D. Pa.) 123 F. 888; valid, infringed (C. C. A. 3rd Cir.) 128 F. 706.

500,284 Galvanic battery, M. M. Hayden, June 27, 1893, valid, infringed (C. C., D. N. J.) 100 F. 82.

500,288 Electric car heater, J. F. McElroy, June 27, 1893, valid, infringed (C. C., D. Mass.) 82 F. 993; (C. C. A. 1st Cir.) 85 F. 662; (C. C., S. D. N. Y.) 87 F. 996.

500,299 Pea hulling machine, Scott & Chisholm, June 27, 1893, valid, infringed (C. C., D. Del.) 106 F. 191; claims 1 to 6 void (C. C. A. 3rd Cir.) 115 F. 625.

500,369 Damping device for music boxes, G. A. Brachhausen, June 27, 1893, not infringed (C. C., S. D. N. Y.) 85 F. 644.

500,370 Damping device for music boxes, G. A. Brachhausen, June 27. 1893, valid, infringed (C. C., S. D. N. Y.) 85 F. 644.

500,371 Music box, Brachhausen & Reissner, June 27, 1893, void (C. C., S. D. N. Y.) 138 F. 903.

500,372 Governor for music box, Brachhausen & Riessner, June 27, 1893, valid, not infringed (C. C., S. D. N. Y.) 85 F.644; valid, infringed (C. C., S. D. N. Y.) 87 F. 333.

500,374 Note plate for music box, Brachhausen & Reissner, June 27, 1893, not infringed (C. C., S. D. N. Y.) 85 F. 644.

500,403 Dynamo electric machine, F. H. Loveridge, June 27, 1893, held to not infringe 496449 (C. C. A. 7th Cir.) 84 F. 654.

500,456 Automatic circuit breaker, A. Wurts, 10 App. D. C. 149.

500,508 Revoluble coal screen, D. E. Phillips, June 27, 1893, void (C. C., W. D. Pa.) 78 F. 632; valid, infringed (C. C. A. 3rd Cir.) 86 F. 137.

501,537 Method of preparing asphalt pavements, A. H. Perkins, July 18, 1893, void (C. C., N. D. N. Y.) 87 F. 339; valid, not infringed (C. C. A. 2nd Cir.) 95 F. 137; void (C. C., N. D. Ill., N. D.) 96 F. 235; (C. C. A. 7th Cir.) 100 F. 965; claim 1 void (Sup. Ct.) 183 U. S. 591.

501,681 Riveting machine, S. Frisbie, July 18, 1893, void (C. C., D. Conn.) 117 F. 318.

502,047 Pneumatic tire, Morgan & Wright, July 25, 1893, not infringed (C. C. A. 3rd Cir.) 126 F. 952.

502,535 Circuit controller for arc lamp, C. E. Scribner, Aug. 1, 1893, held to not infringe 219208 (C. C. A. 7th Cir.) 76 F. 761; (C. C., N. D. Ill.) 69 F. 240.

502,536 Electric arc lamp, C. E. Scribner, Aug. 1, 1893, held to not infringe 219208 (C. C., N. D. Ill.) 69 F. 240; (C. C. A. 7th Cir.) 76 F. 761.

502,891 Coin controlled apparatus, G. F. W. Schultze, Aug. 8, 1893, void (C. C., N. D. Cal.) 82 F. 448.

503,103 Cotton seed delinter, A. D. Thomas, Aug. 8, 1893, valid, infringed (C. C. A. 5th Cir.) 128 F. 709.

503,121 Car brake, J. A. Brill, Aug. 15, 1893, valid, infringed (C.C., E. D. Pa.) 109 F. 901.

503,301 Chain clip for cloth stretching machine, A. A. Whitley, Aug. 15, 1893, not infringed (C. C., D. R. I.) 117 F. 851; (C. C. A. 1st Cir.) 127 F. 338.

503,586 Apparatus for distilling volatile substances from smokeless powder, F. G. Du Pont, Aug. 22, 1893, held not to infringe 429516 (C. C., D. Del.) 122 F. 944.

503,870 Endless chain conveyor, G. W. McCaslin, Aug. 22, 1893, claims 2 and 4 not infringed (C. C., S. D. N. Y.) 139 F. 393; 10 App. D. C. 527.

504,065 Cushioned cap for typewriter key, Graham & Savell, Aug. 29, 1893, valid and infringed (C. C. A. 2nd Cir.) 145 F. 514.

504,097 Hydraulic air pump, E. H. Weatherhead, Aug. 29, 1893, valid, infringed (C. C., N. D. N. Y.) 77 F. 210.

504,290 Engineer's air brake valve, Vaughan & McKee, Aug. 29, 1893, held to infringe 401916 (C. C., N. D. N. Y.) 112 F. 424; held not to infringe 401916 (C. C. A. 2nd Cir.) 119 F. 874.

504,361 Art of steel founding, J. G. McRoberts, 10 App. D. C. 445.

504,944 Tubular umbrella stick, J. Rose, Sept. 12, 1893, void (C. C., E. D. Pa.) 71 F. 881; valid, infringed (C.C.A. 3rd Cir.) 77 F. 469; (C. C., E. D. Pa.) 98 F. 112.

504,945 Umbrella case, J. Rose, Sept. 12, 1893, not infringed (C. C., E. D. Pa.) 71 F. 881; (C. C. A. 3rd Cir.) 77 F. 469.

504,985 Drying rack for printed sheets, H. T. Koerner, Sept. 12, 1893, void (C. C., W. D. N. Y.) 143 F. 544.

505,128 Broom corn cleaner, F. W. Reese, Sept. 19, 1893, void (C. C. A. 7th Cir.) 88 F. 645.

505,607 Wire fabric machine, J. C. Pope, 189 U. S. 8.

506,430 Wooden rim for bicycle wheel, C. F. Harrington, Oct. 10, 1893, void (C. C., E. D. Wis.) 90 F. 488.

506,959 Winding machine, S. W. Wardwell, Oct. 17, 1893, not infringed (C. C., D. Mass.) 136 F. 879.

507,207 Motor truck, J. A. Brill, Oct. 24, 1893, valid, infringed (C. C., E. D. Pa.) 109 F. 901.

507,209 Horse collar, R. Brownson, Oct. 24, 1893, valid, infringed (C. C., D. Minn., 4th Div.) 71 F. 517.

507,224 Coupling for bicycle pump, H. H. Johnson, Oct. 24, 1893, valid, infringed (C. C., D. Ind.) 67 F. 246; void (C. C. A. 7th Cir.) 71 F. 411.

507,300 Cloth measuring machine, J. E. Windle, Oct. 24, 1893, valid, infringed (C. C., D. Vt.) 128 F. 58; void (C. C. A. 2nd Cir.) 134 F. 381.

507,439 Portable boat, C. W. King, Oct. 24, 1893, not infringed (C. C. A. 6th Cir.) 146 F. 133.

507,804 Bicycle bell, S. Goulden, Oct. 31, 1893, held not to infringe 456062 (C. C., D. N. J,) 69 F. 152.

507,805 Rotary bell hammer, S. Goulden, Oct. 31, 1893, held not to infringe 456062 (C. C., D. N. J.) 69 F. 152.

508,542 Ore roasting and calcining furnace, R. C. Greer, Nov. 14, 1893, valid, infringed (C. C., M. D. Pa.) 128 F. 453; (C. C. A. 3rd Cir.) 131 F. 68.

508,557 Adjustable support for school furniture, T. R. Roulstone, Nov. 14, 1893, not infringed (C. C., D. Conn.) 97 F. 103.

508,617 Truck for roller skates, C. G. Hoerle, Nov. 14, 1893, void (C. C., S. D. N. Y.) 112 F. 1006.

508,637 Armature core, H. G. Reist, Nov. 14, 1893, valid, claims 2, 4 and 6 infringed (C. C., E. D. Wis.) 145 F. 193; valid and infringed (C. C., S. D. Ohio, W. D.) 146 F. 549.

508,654 Means for cooling transformers, E. Thomson, Nov. 14,1893, valid, infringed (C. C., W. D., N. Y.) 112 F. 417; void (C. C. A. 2nd Cir.) 117 F. 495.

509,126 Filter, O. H. & I. H. Jewell, Nov. 21, 1893, not infringed (C. C. A. 8th Cir.) 140 F. 340.

509,413 Tension device for winding machine, S. W. Wardwell, Nov. 28, 1893, infringed (C. C., D. Mass.).136 F. 879.

509,553 Ship's propeller, R. B. Painton, Nov. 28, 1893, not infring- (C. C., S. D. N. Y.) 126 F. 193.

510,388 Baling press for cotton, J. W. Graves, Dec. 5, 1893, held not to infringe 441022 (C. C. A. 5th Cir.) 129 F. 355.

510,496 Lawn sprinkler, C. Anderson, Dec.12,1893, held to infringe 461415 (C. C. A. 6th Cir.) 82 F. 428.

1893 (Concluded) 510,934—512,113

510,934 Web holder for knitting machine, J. G. Powell, Dec. 19, 1893, not infringed (C. C., E. D. Pa.) 103 F. 476; valid, infringed (C. C. A. 3rd Cir.) 108 F. 386.

511,469 Fire extinguisher, O. A. Stempel, Dec. 26, 1893, held to not infringe 489767 (C. C., E. D. Mo., E. D.) 75 F. 583.

511,559 Method of operating alternating current motors, N. Tesla, Dec. 26. 1893, not void (C. C., S. D. N. Y.) 94 F. 868; valid, infringed (C. C., S. D. Ohio, W. D.) 106 F. 724; (C. C., S. D. N. Y.) 110 F. 377; (C. C. A. 6th Cir.) 118 F. 562; void (C. C. A. 2nd Cir.) 121 F. 831; valid, infringed (C. C., E. D. Pa.) 125 F. 6; 128 F.747; void (C. C., D.Mass.) 129 F. 140; valid, infringed (C.C., W.D.N. Y.) 129 F. 213; (C. C. A. 1st Cir.) 133 F. 167; (C. C., N. D. Ill., N. D.) 133 F. 396; 134 F. 392; infringed (C. C., W. D. Pa.) 135 F. 365; term not limited by British patent (C. C. A. 1st Cir.) 138 F. 823; 139 F. 385; valid (C. C., N. D. Ill., E. D.) 142 F. 545.

511,560 Alternating current motor, N. Tesla, Dec. 26, 1893, valid, infringed (C. C., S. D. Ohio, W. D.) 106 F. 724; (C. C., S. D. N. Y.) 110 F. 377; (C. C. A. 6th Cir.) 118 F. 562; void (C. C. A. 2nd Cir.) 121 F. 831; valid, infringed (C. C., E.D. Pa.) 125 F. 6; 128 F. 747; void (C.C., D.Mass.) 129 F. 140; valid, infringed (C.C., W. D. N. Y.) 129 F. 213; (C. C. A. 1st Cir.) 133 F. 167; (C. C., N. D. Ill., N. D.) 133 F. 396; 134 F. 392; infringed (C. C., W. D. Pa.) 135 F. 365; term not limited by British patent (C. C. A. 1st Cir.) 138 F. 823; 139 F. 385; valid (C. C., N. D. Ill., E. D.) 142 F. 545.

1894

511,770 Strainer for paper pulp, D. B. Gotham, Jan. 2, 1894, held to infringe 417451 (C. C., N. D. N. Y.) 124 F. 542.

511,789 Imitation chamois or buckskin, J. C. McLauchlin, Jan. 2, 1894, void (C. C., N. D. Ohio, E. D.) 69 F. 247; (C. C. A. 6th Cir.) 72 F. 508; not infringed (C. C. A. 6th Cir.) 72 F. 516.

511,915 Method of operating alternating current motors, N. Tesla, Jan. 2, 1894, valid, infringed (C. C., E. D. Pa.) 97 F. 588.

511,923 Lifting jack, J. Barrett, Jan. 2, 1894, void (C. C., D. Mass.) 96 F. 986.

512,113 Dress stay, J. Janowitz, Jan. 2, 1894, valid, infringed (C. C., S. D. N. Y.) 80 F. 731; void (C. C. A. 2nd Cir.) 82 F. 63.

512,151 Cigarette machine, W. C. Briggs, Jan. 2, 1894, held to not infringe 238640 and 247795 (C.C., W.D. N.C.) 70 F.383.

512,504 Chimney, A. Custodis, Jan. 9, 1894, validity questioned (C. C., S. D. N. Y.) 135 F. 552; void (C. C., S. D. N. Y.) 142 F. 759.

513,307 Window or curtain fixtures, G. A. Crisson, Jan. 23, 1894, valid, infringed (C. C., D. Me.) 93 F. 462.

513,611 Dynamo brush, W. H. Fleming, 12 App. D. C. 509.

513,617 Pneumatic tire, J. G. Moomy, Jan. 30, 1894, held to infringe 488494 (C. C., W. D. Pa) 66 F, 558; held to not infringe 488494 (C. C. A. 3rd Cir.) 70 F. 58.

513,998 Core making machine, E. Grant, Feb. 6, 1894, void (C. C., N. D. Ill.) 125 F. 34; (C. C. A. 7th Cir.) 133 F. 235.

514,664 Coin controlled apparatus, G. F. W. Schultze, Feb. 13,1894, void (C. C., N. D. Cal.) 82 F. 448.

515,124 Non-overflow oil can and filler, E. W. Luce, Feb. 20, 1894, valid and infringed (C. C., N. D. Ohio, E. D.); Delphos Can Co. v. Standard Oil Can Co., decided Feb. 1904, not reported.

515,426 Piano attachment, French & Nalence, Feb. 27, 1894, valid, infringed (C. C., N. D. Ill.) 79 F. 79.

515,673 Mill for pulverizing ores, Griffin & Griffin, Feb.27,1894, not infringed (C. C., D. Mass.) 111 F. 537.

515,805 Workman's time recorder, N. M. Watson, Mar.6,1894, held to infringe 452894 (C. C. A. 6th Cir.) 94 F. 524.

515,846 Fire extinguisher, O. A. Stempel, Mar. 6, 1894, held to not infringe 489767 (C. C., E. D. Mo., E. D.) 75 F. 583.

517,100 Electric switch, J. S. Gibbs, Mar. 27, 1894, not infringed (C. C., D. Conn.) 87 F. 922.

517,271 See Reissue 11523.

517,395 Alarm bell for street cars, E. D. Rockwell, Mar. 27, 1894, not infringdd (C. C., D. Conn.) 88 F. 901.

518,305 See Reissue 11592.

518,506 Wire fence, Lane & Lane, Apr. 17, 1894, void (C. C. A. 6th Cir.) 99 F. 286.

519,067 Boot or shoe last, J. C. Kupferle, May 1, 1894, held to infringe 443199 (C. C., D. Mass.) 74 F. 935.

519,158 Perforated wrapper with tearing slip, P. J. Ogle, 14 App. D. C. 145.

523,833 Machine for making pasteboard hat packing rings, F. P. Ferry, July 31, 1894, valid and infringed (C. C., E. D. Pa.) 142 F. 172.

519,216 Car coupling, Wolcott & O'Hara, May 1, 1894, infringed(C. C., E. D. Mo., E. D.) 70 F. 783; not infringed (C. C. A. 8th Cir.) 77 F. 739.

520,259 Grip for cable railway, C. I. Earll, May 22, 1894, infringed (C. C., S. D. N. Y.) 85 F. 214.

520,429 Electric battery, S. H. Hoggson, May 29, 1894, void (C. C., S D. N. Y.) 131 F. 495; valid and infringed (C.C.A.2nd Cir.) 137 F. 913; preliminary injunction granted (C. C., S. D. N. Y.) 140 F. 444; preliminary injunetion denied (C. C. A. 2nd Cir.) 142 F. 754.

520,481 Ore roaster, O. W. Davis, Jr., May 29, 1894, validity questioned, not infringed (C. C , M. D. Pa.) 128 F. 453.

520,875 Pyrometer, E. Brown, June 5, 1894, void (C.C., S. D. N.Y.) 105 F. 245.

520,999 Device for assembling button parts, I. G. Platt, June 5,1894, not void (C. C., D. Me.) 84 F. 189.

521,174 Pneumatic duster, E. Nation, June 12, 1894, not infringed(C. C. A. 7th Cir.) 125 F 761.

521,218 Fashioning device for circular knitting machine, Paxton & O'Neill, June 12, 1894, valid, infringed (C. C., E.D. Pa.) 107 F. 137; (C. C. A. 3rd Cir.) 134 F. 78.

521,231 Lid for car axle boxes, N. H. Davis, June 12, 1894, held to infringe 379712 and 423795 (C. C., D. Del.) 78 F. 129.

521,461 Combined annunciator and spring jack, H. M. Fisk, June 19, 1894, valid, infringed (C. C. A. 7th Cir.) 131 F. 75; 141 F. 998.

521,614 Safety oil can, L. Hirsch, June 19,1894, not infringed (C.C., S. D. N. Y.) 110 F 203.

521,722 Centrifugal cream separator, Melotte & Reuther, June 19, 1894, void (C. C., D Vt.) 126 F. 536; (C.C.A. 2nd Cir.) 135 F. 772.

522,435 Spring tooth harrow, W. E. Smith, July 3, 1894, valid, infringed (C. C., E. D. Pa.) 94 F. 865.

522,934 Electric cigar lighter, Eberhard & Schimkatt, July 10, 1894, not infringed (C. C. A. 7th Cir.) 106 F. 509.

523,111 Circular knitting machine, J. L. Eck, July 17, 1894, valid, infringed (C. C., E. D. Pa.) 132 F. 758.

524,178 Stuffing box packing, N. B. Miller, Aug. 7, 1894, valid, infringed (C. C., E. D. Pa.) 81 F. 1000; void (C. C., E. D. Pa.) 131 F. 469; (C. C. A. 3rd Cir.) 146 F. 74.

524,254 Blue coloring matter, P. Julius, Aug. 7, 1894, valid, infringed (C. C., S. D. N. Y.) 94 F. 163; (C. C. A. 2nd Cir.) 104 F. 802.

524,271 Platform scale, M. H. Winslow, 14 App. D C. 137.

524,502 Hoisting and conveying apparatus, T. F. Moore, Aug. 14, 1894, valid, infringed (C. C., N. D. N. Y.) 93 F.467; not infringed (C. C. A. 6th Cir.) 107 F. 491.

524,965 Serrator for sickle sections, M. Gindorff, Aug. 21, 1894, claim 1 valid, infringed, claims 4 and 5 void (C. C., N. D. Ill.) 81 F. 952.

525,152 Lacing stud or eyelet, A. Mathison, Aug. 28, 1894, void (C. C., S. D. N. Y.) 77 F. 827.

525,746 Insole for slippers, A. Sessler, Sept. 11, 1894, not infringed (C. C., S. D. N. Y.) 78 F. 482; (C. C. A. 2nd Cir.) 80 F. 291.

525,941 Apparatus for duplicate whist, G. A. Bisler, Sept. 11, 1894, valid, infringed (C. C., S. D. N. Y.) 90 F. 729.

526,486 Medicine or sample case, F. C. Gundlach, Sept. 25, 1894, valid, infringed (C. C., S. D. N. Y.) 106 F. 733; not infringed (C. C. A. 2nd Cir.) 112 F. 677.

526,517 Wrapper for tobacco, J. Conley, Sept. 25, 1894, void (C. C., S. D. N. Y.) 83 F. 309.

526,839 Hay carrier apparatus, W. Louden, Oct. 2, 1894, void (C.C., W. D. Wis.) 141 F. 975.

526,947 Water tube steam boiler, J. E. Schlieper, Oct. 2, 1894, not infringed (C. C., W. D. Pa.) 144 F 849.

526,968 Chocolate cream dipper, C. Gousset, Oct. 2, 1894, valid, infringed (C. C., S. D. N. Y.) 129 F. 919; claim 4 infringed (C C. A. 2nd Cir.) 142 F. 978.

527,102 Lifting jack, J. Barrett, Oct. 9, 1894, infringed (C. C., W. D. Pa.) 78 F. 626; (C. C. A. 3rd Cir.) 81 F. 865; valid, infringed (C. C., W. D. Mich., S. D.) 94 F. 154.

527,169 Method of calking vessels, A. J. Brooks, 39 Ct. of Cls. 494.

527,242 Process of making expanded sheet metal, J. F. Golding, Oct. 9, 1894, valid. infringed (C. C., E. D. Pa.) 136 F. 870; void (C. C. A. 3rd Cir.) 146 F. 984.

527,361 Enameling metal ware, H. Claus, Oct. 9, 1894, claims 1, 2 and 3 void, claims 4 to 8 and 9 to 12 valid, infringed (C. C., S. D. N. Y.) 139 F. 643.

527,382 See Reissue 11462.

527,534 Disk water meter, L. H. Nash, Oct. 16, 1894, claims 1 and 2 void (C. C., D. N. J.) 122 F. 82; void (C. C. A. 3rd Cir.) 129 F. 124.

527,535 Disk water meter, L. H. Nash, Oct. 16, 1894, held to not infringe 387831 (C. C., S. D. N. Y.) 106 F. 519; claims 1 and 2 void (C. C., S. D. N. Y.) 106 F. 531.

527,537 Disk water meter, L. H. Nash, Oct. 16, 1894, void (C.C., D. N. J.) 122 F. 82; (C C. A. 3rd Cir.) 129 F. 124.

527,633 See Reissue 11508.

527,634 See Reissue 11514.

528,223 Workman's time recorder, D. M. Cooper, Oct. 30, 1894, valid, infringed (C. C. A. 2nd Cir.) 142 F. 736.

528,550 Self threading loom shuttle, J. H. Nason, Nov. 6, 1894, not infringed (C. C., D. Mass.) 126 F. 762.

529,680 Printing machine, J. L. Firm, Nov. 20, 1894, claims 11, 12 and 13 void (C. C., D. N. J.) 103 F. 650: (C. C. A. 3rd Cir.) 108 F. 253.

529,724 Fireproof floor and ceiling, J. F. Golding, Nov. 27, 1894, held not to infringe 471772 (C.C., W.D.N.Y.) 131 F.265.

530,533 Process and apparatus for separating cotton seed and hulls from fiber, W. C. Johnson, Dec. 11, 1894, apparatus claims invalid, process clams valid and infringed (C. C. A. 6th Cir.) 141 F. 73.

530,586 Strainer for paper pulp, D B. Gotham, Dec. 11, 1894, held to infringe 417451 (C. C., N. D. N. Y.) 124 F. 542.

530,794 Cigar mold, J. H. Ogden, Dec. 11, 1894, valid, infringed (C. C , E. D. Pa.) 99 F. 293; (C. C. A. 3rd Cir) 104 F. 997.

531,570 Machine for embedding wire netting in glass, F. M. Ryon, Dec. 25, 1894, held to infringe 423020 and 423021 (C. C. A. 7th Cir.) 97 F. 950.

1895

531,686 School seat hinge, A. D. Linn, Jan. 1, 1895, not infringed (C. C., N. D. Ill., N. D.); American School Furniture Co. v. Century Seating Co., No. 25658, decided Nov. 12, 1901, not reported.

531,711 Wooden flooring, Wilce & Burnham, Jan. 1, 1895, void (C. C. A. 7th Cir.) 134 F. 389.

532,013 Ore roasting furnace, A. Ropp, Jan. 1, 1895, held to infringe 471264 (C. C. A. 8th Cir.) 104 F. 345; (C. C., D. Wash., N. D.) 110 F. 383; (C. C. A 8th Cir.) 115 F. 150.

532,175 Saw set, C. Morrill, Jan. 8, 1895, not infringed (C.C.A. 2nd Cir.) 142 F. 756.

532,216 Coal wagon, W. O. Shadbolt, Jan. 8, 1895, not infringed (C. C. A. 2nd Cir.) 128 F. 736.

532,444 Bicycle saddle, H. A. Christy, Jan. 15, 1895, void (C. C., D. Md.) 87 F. 903; (C. C. A. 4th Cir.) 93 F. 965.

532,554 Machine for cutting candy, M. S. Hershey, Jan. 15, 1895, void (C. C., E. D. Pa.) 138 F. 142.

532,973 Press for making screw insulators, S. Kribs, Jan. 22, 1895, not infringed (C. C., D. N. J.) 124 F. 551; 132 F. 316.

533,207 Cigar tip cutter, W. H. Campbell, Jan. 29, 1895, valid, infringed (C. C., E. D. N. Y.) 101 F. 123.

533,208 Cigar tip cutter, W. H. Campbell, Jan. 29, 1895, not infringed (C. C., E. D. N. Y) 101 F. 123.

533,331 Process of making cell cases or egg carriers, W. E. Williams, Jan 29, 1895, void (C. C., D. Ind.) 84 F. 960.

533,374 Paper cutting tool, C. T. Ridgely, Jan. 29, 1895, held to not infringe 408193 (C. C. A. 6th Cir.) 103 F. 875.

533,375 Paper cutting tool, C. T. Ridgely. Jan. 29, 1895, held to not infringe 408193 (C. C. A. 6th Cir.) 103 F. 875.

533,408 Cuff, E K. Betts, Jan. 29, 1895, void (C. C., E. D. Pa.) 87 F. 740.

533,867 Bicycle pedals, A. B. Curtis, Feb. 12, 1895, claims 1 and 2 valid, infringed, claims 3 and 4 void (C.C., D. N. J.) 136 F. 222.

533,974 Chocolate dipping or coating machine, W. Walter, Feb. 12, 1895, infringed (C. C., S. D. N. Y.) 129 F. 919; not infringed (C. C. A. 2nd Cir.) 142 F. 978.

534,543 Gramophone, E. Berliner, Feb. 19, 1895, valid, claims 5 and 35 infringed (C. C., S. D. N. Y.) 140 F. 860; (C. C. A. 2nd Cir.) 145 F. 351; claims 5 and 35 valid and infringed (C C., S. D. N. Y.) 146 F. 534.

534,785 Process of applying asbestos insulation to electrical conductors, L. W. Downes. Feb. 26, 1895, not infringed by 740131 (C. C., M. D. Pa.) 144 F. 106.

535,097 Safety device for revolvers, F. B. Felton, Mar. 5, 1895, claim 1 void, claims 2 and 3 not infringed (C. C., D. Mass.) 122 F. 90; claims 1, 2 and 3 void (C. C. A· 1st Cir.) 127 F. 333.

535,158 Regulator for electric circuit, J. M. Bradford, Mar. 5, 1895, not infringed (C. C., D. Me.) 105 F. 63; (C. C. A. 1st Cir.) 115 F. 711.

535,465 Means for operating washing machines, J. Schroeder, Mar. 12, 1895, valid, infringed (C. C., S. D. Iowa, W. D.) 98 F. 880; (C. C. A. 8th Cir.) 106 F. 918; held infringed on motion for preliminary injunction (C. C., E. D. Wis.) 132 F. 614; valid and infringed (C. C., N. D. N. Y.) 144 F. 429.

535,467 Turbine water wheel, A. M. Swain, Mar. 12, 1895, void (C. C., D. Mass) 102 F. 910; claims 1, 2 and 3 void (C. C. A. 1st Cir.) 109 F. 154.

535,982 Lumber drier, V. L. Emerson, Mar. 19, 1895, void (C. C., E. D. N. C.) 88 F. 280; valid, infringed (C. C. A. 4th Cir.) 99 F. 737.

536,734 Railway switch work, A. J. Moxham, Apr. 2, 1895, void or not infringad (C. C., D. Ohio, W. D.) 116 F. 490; void (C. C. A. 6th Cir.) 119 F. 885.

536,742 Machine for plucking pelts, J. W. Sutton, Apr. 2, 1895, valid, infringed (C. C., E. D. N. Y.) 87 F. 997.

537,293 Ventilator for refrigerator car, T. B. Kerby, Apr. 9, 1895, held to infringe Reissue 11324 (C. C. A. 9th Cir.) 82 F. 737; (C. C. A. 9th Cir.) 92 F. 155

537,434 Liquor cabinet, H. D Berner, Apr. 16, 1895, infringed (C. C., S. D. N. Y.) 119 F. 363.

537,481 Swage for dental plates, J. C. Parker, Apr 16, 1895, held to anticipate 571102 (C. C., N. D. Cal.) 117 F. 617.

537,629 Pneumatic tool, J. Boyer, Apr. 16, 1895, not infringed (C. C., E. D. Pa.) 110 F. 217; valid, infringed (C. C A. 3rd Cir.)127 F.130; not infringed (C.C.A.3rd Cir.)135 F.783.

537,679 Oil guard for electric fans, P. Diehl, Apr. 16, 1895, valid, infringed (C. C., S. D. N. Y.) 109 F. 566.

537,939 Apparatus for racking beer, W. C. Savage, Apr. 23, 1895, not infringed (C. C., D N. J.) 124 F. 531; void (C. C. A. 3rd Cir.) 130 F. 112.

538,001 Quick action valve for air brake, G. Westinghouse, Jr., Apr. 23, 1895, not infringed (C. C., S. D. N. Y.) 87 F. 882; (C. C. A. 2nd Cir.) 96 F. 991.

538,884 Ore crusher, A. H. Schierholz, May 7, 1895, infringed (C.C., N. D. Cal.) 92 F. 375; (C. C. A. 9th Cir.) 102 F. 635.

539,171 Machine for filling paper bags, H. H. Cummings May 14, 1895, infringed (C. C., W. D. N. Y.) 140 F. 97.

539,189 Steam boiler, H. S. Pell. May 14, 1895, valid, infringed (C. C., E. D Mo,, E. D.) 79 F. 80.

539,224 Elastic fabric, R. W. Huss. May 14, 1895, priority sustained (C. C., N. D. Ohio, E. D.) 84 F. 659; void (C. C A 6th Cir.) 90 F. 732.

539,337 Slipper sole, S. Borchardt, May 14, 1895, held to not infringe 525746 (C. C.. S. D. N. Y.) 78 F. 482; (C. C. A. 2nd Cir.) 80 F. 291.

539,366 Lock seam can with rip strip, E. M. Norton, May 14, 1895, void (C. C. A. 7th Cir) 142 F. 166.

539,406 Machine for inserting strips in cane work, Bancroft & Rich, May 21, 1895, held to not infringe 401050 (C.C., D. Mass.) 85 F. 457.

539,524 Hay carrier apparatus, W. Louden, May 21, 1895, void (C. C., W. D. Wis.) 141 F 975.

539,495 Corn planter, L. E. Waterman, May 21, 1895, held to infringe 480304 (C. C. A. 7th Cir.) 84 F. 171.

539,713 Photographic film roll, S. N. Turner, May 21, 1895, claims 1, 2 and 3 void (C. C., S. D. N. Y.) 139 F. 36; void (C. C. A. 2nd Cir) 145 F. 833.

539,878 Railway switch work, A. J. Moxham, May 28, 1895, valid, infringed (C. C., D. N. J.) 124 F. 548.

539,903 Brush, W. Morrison, May 28, 1895, preliminary injunction granted (C. C , N. D. N Y.); Universal Brush Co. v. Morrison, decided May 26, 1905, not reported.

540,072 See Reissue 11685.

540,746 Eye shield, B. F Lamb, June 11, 1895, valid, infringed (C. C., D. Mass.) 81 F. 389; not infringed (C. C., D. Mass.) 99 F. 993.

540,796 Railway switch work, A J. Moxham, June 11, 1895, void or not infringed (C. C., D. Ohio, W. D.) 116 F. 490; void (C. C. A. 6th Cir.) 119 F. 885.

540,800 Electric arc lamp, S. P. Parmly, June 11, 1895, valid, infringed (C. C., W. D. Pa.) 96 F. 413.

541,101 Thrashing machine, F. F. Landis, June 18, 1895, held to not infringe 401840 (C. C. A. 3rd Cir.) 100 F. 94.

541,203 Bottle sealing device, R. A. Hall, June 18, 1895, held to not infringe Reissue 11685 (C. C., D. Md.) 100 F. 849; held to infringe Reissue 11685 (C. C. A. 4th Cir.) 108 F. 845.

541,244 Stair pad, Marcus & Collins, June 18, 1895, valid, not infringed (C. C., E. D. N. Y.) 124 F. 74.

541,320 Rug fastener, S. B. Donchian, June 18, 1895, not infringed (C. C., D. Mass.) 138 F. 890.

541,446 Car coupler, C. A. Tower, June 18, 1895, held to not infringe Reissue 10941 (C C., N. D. Ohio, E. D.) 81 F. 706; (C C. A. 6th Cir.) 87 F. 885.

541,722 Overseaming sewing machine, J. T. Collins, June 25, 1895, held to not infringe 472094 and 472095 (C. C., D. Conn.) 83 F. 179.

541,941 Process of making lump starch, A. Moffatt, July 2, 1895, plea of non-infringement stricken out (C. C., N. D Ia., C. R. Div.) 145 F. 949.

542,306 Waist belts, H. J. Gaisman, July 9, 1895, valid, infringed (C. C., S. D. N. Y.) 105 F. 955.

542,331 Feed water heater and purifier, P. J. Cookson, July 9, 1895, held to infringe 400319 (C. C., N. D. Ill., N. D.) 89 F. 88; reversed (C. C. A. 7th Cir.) 89 F. 498.

542,349 Apparatus for repairing asphalt pavement, 183 U. S. 591.

542,452 Celluloid articles, Thurber & Schaefer, July 9, 1895, valid, infringed (C. C., D. N. J.) 85 F. 449; void (C. C. A. 3rd Cir.) 97 F. 91.

542,565 Press for making screw insulators, S. Kribs, July 9, 1895, valid, infringed (C. C., D. N. J.) 124 F. 551; held not infringed on motion for preliminary injunction (C. C., D. N. J.) 132 F. 312; 132 F. 316; held infringed but not by 723589 (C C., D. N J.) 144 F. 418.

543,072 Brake shoe, C. F. Wohlfarth, July 23, 1895, void (C. C., N. D. N. Y.) 94 F. 162.

543,347 Key opening can, C. B. McDonald, July 23, 1895, void (C. C. A. 7th Cir.) 142 F. 166.

543,834 Fruit seeding machine, G. C. La Due, July 30, 1895, valid, claims 1 to 5 infringed, claims 6 to 8 not infringed (C.C., N. D. Cal.) 94 F. 845; claim 1 not infringed, claims 2,3, 4 and 5 infringed (C C. A. 9th Cir.) 101 F. 826.

544,368 Strong current arrester, F. R. McBerty, 16 App. D. C. 133.

544,441 Device for grinding teeth of carding machine, L. W. Penney, Aug. 13,1895, held to not infringe 464029 (C.C.,D.Mass.) 114 F. 497; (C. C. A. 1st Cir.) 122 F. 632.

544,637 Breech-loading ordnance, R. B. Dashiell, Aug. 13, 1895, claims 12, 14, 19 and 20 void (C. C., D. Conn.) 99 F. 982; claim 19 void (C. C. A. 2nd Cir.) 109 F. 83.

545,040 Rail joint, Hoffman & Falk, Aug. 20, 1895, void (C. C., E. D. Mo., E. D.) 91 F 155; (C. C. A. 8th Cir.) 103 F. 295.

545,625 Feed for shoe sewing machine, Fowler & Warren, Sept. 3, 1895, not infringed (C. C. A. 1st Cir.) 112 F. 146.

545,664 Current controller for electric motor, T. Von Zweigbergk, Sept. 3, 1895, held to infringe cer ain claims of 393323 and to not infringe others (C. C., D. Conn.) 87 F. 733.

545,906 Glove fastener, W. B. Murphy, Sept. 10, 1895, held to infringe 405179 (C. C., N. D. N. Y.) 79 F. 795.

546,071 Bicycle pedal, C. H. Metz, Sept. 10, 1895, void (C. C., D. Mass.) 112 F. 1014.

546,360 Imitation onyx from pyroxilin compounds, Stevens & Harrison, Sept. 17, 1895, valid, infringed (C. C., D. N. J.) 85 F. 449; void (C. C. A. 3rd Cir.) 97 F. 91.

546,560 Electric locomotive, S. H. Short, Sept. 17, 1895, held to infringe claims 2 and 6 and to not infringe claim 9 of 324-892 (C. C. A. 2nd Cir.) 88 F. 82; held to not infringe 448260 (C. C. A. 1st Cir.) 91 F. 767.

547,149 Electric snap switch, N. Marshall, Oct. 1, 1895, held to infringe Reissue 11395 (C. C. A. 1st Cir.) 92 F. 657.

547,178 Disk water meter, L. H. Nash, Oct. 1, 1895, claim 1 valid, infringed, claim 3 void (C. C., S. D. N. Y.) 106 F. 531.

547,185 Refrigerator crate, W. A. Schrei, Oct. 1, 1895, void (C. C., N. D. Ill.) 87 F. 217; (C. C. A. 7th Cir.) 91 F. 993.

547,732 Wooden rim bicycle wheel, G. W. Marble, Oct. 8,1895, void (C. C., E. D. Wis.) 90 F.488; (C. C. A. 7th Cir.) 103 F. 496.

547,921 Firecracker, E. S. Hunt, Oct. 15, 1895, void (C.C., D.Mass.) 81 F. 385.

548,115 Tubular ball pulverizing mill, J. Davisen, Oct. 15,1895, void or not infringed (C. C., E. D. Pa.) 106 F. 930; void (C. C., S. D. N. Y.) 110 F. 751; (C. C. A. 3rd Cir.) 114 F. 262.

548,143 Metallic button, A. J. Shipley, Oct. 15, 1895, held to not infringe 429530 (C. C., D. Conn.) 92 F. 151.

548,149 Steroscope, H. C. White, Oct. 15, 1895, valid, infringed (C. C., D. Vt.) 118 F. 166; not infringed (C. C. A. 2nd Cir.) 126 F. 373.

548,394 Saw stretching machine, E. B. Rich, Oct. 22, 1895, valid, not infringed (C. C. A. 6th Cir.) 133 F. 920.

548,623 Duplicate sound record and method of making same, E. Berliner, Oct. 29, 1895, not infringed (C. C., S. D. N. Y.) 145 F. 189.

549,102 Pneumatic tool, J. Boyer, Nov. 5, 1895, infringement of 364-081 doubted (C. C. A. 2nd Cir.) 77 F. 988; held to not infringe 364081 (C. C., D. Conn.) 100 F. 467.

549,160 Gas automobile, G. B. Selden, Nov. 5, 1895, not void (C.C., S. D. N. Y.) 104 F. 814; valid and infringed (C. C., E. D. Pa.); Electric Vehicle Co. v. de Feher, No. 40 of 1904, decree entered Dec. 27, 1905, not reported; (C. C., W. D. N. Y.); Electric Vehicle Co. v. Buffalo Gasoline Motor Co., decree Aug. 5, 1903, not reported; (C. C., S. D. N Y.); Electric Vehicle Co. v. Winton Motor Carriage Co., decree Mar. 20, 1903, not reported; (C. C., S. D. N. Y.); Electric Vehicle Co. v. Automobile Fore Carriage Co., decree May 29, 1901, not reported; (C. C., S. D. N. Y.); Electric Vehicle Co. v. Smith & Mabley. decree Apr. 15, 1903, not reported; (C. C., D. Vt.); Electric Vehicle Co. v. Ranlet Automobile Co., decree May 21, 1901, not reported.

549,370 Metallic mattress frame, A. E. Kenney, Nov. 5, 1895, void (C. C., D. Mass.) 91 F. 259; claim 2 void (C. C. A. 1st Cir.) 97 F. 337.

549,375 Berry box machine, J. G. Lettelier, Nov. 5, 1895, void (C. C., S. D. Cal.) 91 F. 917.

549,691 Platen for printing press, M. L. Severy, Nov. 12, 1895, not infringed (C. C., S. D. N. Y.) 113 F. 581.

550,177 Fireproof floor construction, A. L. Johnson, Nov. 19, 1895, held to not infringe 320066 (C. C., N. D. Cal.) 112 F. 361.

550,551 Underwaist, J. C. Andrews, Nov.26,1895, held to anticipate 629391 (C. C. A. 7th Cir.) 133 F. 228.

550,587 Bicycle crank hanger, Burnham & Alsup, Dec. 3, 1895, claims 1 and 2 void, claim 4 valid, not infringed (C. C. A. 6th Cir.) 110 F. 765.

550,823 Electric meter, T. Duncan, Dec. 3, 1895, valid between parties (C. C. A. 7th Cir.) 142 F. 157.

550,815 Securing metal spokes to metal hub, Bettendorf & Bettendorf, Dec. 3, 1895, void (C. C. A. 7th Cir.) 123 F. 433.

552,025 Wire fabric machine, W. D. Whitney, Dec. 24, 1895, held to infringe 356322 (C. C. A. 7th Cir.) 108 F. 632; held to not infringe 356322 (Sup. Ct.) 189 U. S. 8.

552,470 Hose supporter, R. Gorton, Dec. 31, 1895, valid, infringed (C. C., S. D. N. Y.) 112 F. 1009; 114 F. 1021; not infringed (C. C., S. D. N. Y.) 116 F. 982; valid (C. C. A. 2nd Cir.) 119 F.505; valid, infringed (C. C. A. 2nd Cir.) 125 F. 942.

552,506 Upper for laced shoes, W. T. Benjamin, Jan. 7, 1896, void (C. C., D. Mass.) 100 F. 652; (C.C.A.1st Cir.) 105 F.74.

552,729 Spring jack telephone switch, C. E. Scribner, Jan. 7, 1896, valid, infringed (C. C. A. 6th Cir.) 135 F. 79.

552,796 Mechanical musical instrument using perforated music sheet, Tremaine & Paine, Jan. 7, 1896, valid, infringed by 659-442 (C. C. A. 9th Cir.) 143 F. 880.

553,055 Compartment foundry ladle, W. T. Coughlin, Jan. 14, 1896, valid, not infringed (C. C. A. 5th Cir.) 141 F. 91.

553,284 Riveting machine, F. A. Jaberg, Jan. 21, 1896, valid, infringed (C. C., N. D. Ohio, E. D.) 109 F. 161.

553,469 Alternating current motor, Hutin & Leblanc, Jan. 21, 1896, valid, infringed (C. C., S. D. N. Y.) 97 F. 605.

553,707 Skirt protector, H. Feder, Jan. 28, 1896, valid, infringed (C. C., S. D. N. Y.) 105 F. 627.

553,740 Starter's gate for race track, P. Ryan, Jan. 28, 1896, not infringed (C. C., E. D. N. Y.) 139 F. 579; (C. C. A. 2nd Cir.) 144 F. 697.

554,212 Lead pencil, C. W. Boman, Feb. 4, 1896, held to not infringe 461911 (C. C., S. D. N. Y.) 86 F. 134.

554,353 Electric locomotive, C. F. Uebelacker, Feb. 11, 1896, held to not infringe 448260 (C. C. A. 1st Cir.) 91 F. 767.

554,675 Rubber tired wheel, A. W. Grant, Feb. 18, 1896, valid, infringed (C. C., S. D. N. Y.) 91 F. 978; void (C.C.A.6th Cir.) 116 F. 363; valid, infringed (C. C., N. D. Ga.) 116 F. 629; 119 F. 705; void (C.C A.6th Cir.) 123 F.85; considered on action for royalties (C. C., E. D. Wis.) 142 F. 531.

555,033 Bath water heater, T. C. Beaumont, Feb. 18, 1896, not infringed (C. C., S. D. N. Y.) 113 F. 599; (C. C. A. 2nd Cir.) 125 F. 944.

555,190 Alternating current motor, N. Tesla, Feb. 25, 1896, valid, infringed (C. C., E. D Pa.) 97 F. 588.

555,434 Shoe pegging machine, J. F. Davey, Feb. 25, 1896, claims 1, 2, 3 and 10 void or not infringed (C C., D. Mass.) 96 F. 336; valid, not infringed (C. C. A. 1st Cir.) 107 F. 505.

555,449 Railway crossing, Johnson & Fry, 18 App. D. C. 83.

555,503 Control mechanism for electric motor, L. T. Gibbs, Mar. 3, 1896, held to infringe 565867 (C.C.,E.D.Wis.) 91 F. 650.

555,669 Air brush, O. C. Wold, Mar. 3, 1896, valid and infringed (C. C., N. D. Ill., E. D) 142 F. 776.

555 693 Fireproof ceiling or wall, H. & W. Geraerdts. Mar. 3, 1896, valid, infringed (C. C. A. 2nd Cir.) 139 F. 801.

555,825 Locking device for elevator, Muckle & Teamer, Mar.3,1896, claims 1 and 2 void (C. C., E. D. Pa.) 139 F. 28; claims 1 and 2 void or not infringed (C.C.A.3rd Cir.) 143 F.972.

555,903 Apparatus for duplicate whist, W. T. Johnson, Mar. 3, 1896, held to infringe 525941 (C. C., S. D. N. Y.) 90 F. 729.

556,280 Apparatus for improving combustion, P. J. Schlicht, Mar. 10, 1896, claims 5, 6 and 13 void, claims 3, 4, 8, 10, 12, 14 and 22 infringed (C. C., S. D. N. Y.) 117 F. 299.

556,282 Apparatus for improving combustion, P. J. Schlicht, Mar. 10, 1896, claim 2 void, claim 1 infringed (C. C., S. D. N. Y.) 117 F. 299.

556,283 Apparatus for improving combustion, P J. Schlicht, Mar. 10, 1896, claim 1 void (C. C., S. D. N. Y.) 117 F. 299.

556,285 Apparatus for improving combustion, P. J. Schlicht, Mar. 10, 1896, not infringed (C. C., S. D. N. Y.) 117 F. 299.

556,326 Band cutter and feeder for thrashing machine, Albertus & Johnson, Mar. 17, 1896, void (C. C., D. Minn., 4th Div.) 106 F. 941.

556,591 Method of producing embossed photographs, F. A. Taber, Mar. 17, 1896, not infringed (C. C , N. D. Cal.) 87 F. 871.

556,943 Aromatic ketone and process of making same, J. C. W. F. Tiemann, Mar. 24, 1896, claim 1 not infringed (C. C., S. D. N. Y.) 145 F. 357.

556,972 Rotary disc plow, C. A. Hardy, Mar. 24, 1896, valid, infringed (C. C. A. 6th Cir.) 128 F. 424.

557,129 Machine for brushing and for removing hairs from pelts, P. Jenik, Mar. 31, 1896, held to infringe 383258 and not infringe Reissue 11079 (C. C., S. D. N. Y.) 95 F. 474.

557,582 Machine for printing barrel heads, F. X. Hooper, Apr. 7, 1896, void (C. C., D. Minn.) 84 F. 339.

557,641 Straight knitting machine, J. Bennor, Apr. 7, 1896, held to not infringe 510934 (C C , E. D. Pa.) 103 F. 476.

557,727 Fodder shredder, Tracy & Platt, Apr. 7, 1896, void (C. C., N. D. Ill., N. D.) 100 F. 475.

557,737 Sectional bookcase, O. H. L. Wernicke, Apr. 7, 1896, claims 12, 15, 16, 17, 18, 19 and 20 void (C. C. A. 6th Cir.) 119 F. 696.

557,868 Disc grain drill, F. R. Packham, Apr. 7, 1896, valid, infringed (C. C. A. 6th Cir.) 115 F. 886.

558,218 Bicycle saddle, W. W. Shoe, Apr. 14, 1896, void or not infringed (C. C., E. D. Pa.) 96 F. 96.

558,244 Newspaper wrapper, B. Williams, Apr. 14, 1896, void (C. C., N. D. Ill.) 81 F. 200; (C. C. A. 7th Cir.) 84 F. 197; valid (C. C. A. 7th Cir.) 86 F. 641.

558,393 Granose flakes, J. H. Kellogg, Apr. 14, 1896, claim 2 void (C. C. A. 6th Cir.) 139 F. 551.

558,969 Paper bag machine, W. Liddell, Apr. 28, 1896, valid and infringed by 598497 (C. C., D. Me.) 142 F. 479.

559,232 Socket for incandescent lamp, J. C. Tournier, Apr. 28, 1896, claims 1, 2, 3 and 4 valid, infringed, claim 9 void (C. C., S D N. Y.) 106 F. 503; valid, infringed (C. C., N. D. N. Y.) 119 F. 922.

559,411 Telephone signaling apparatus, Scribner & McBerty, May 5, 1896, void (C. C., W. D. N. Y.) 132 F. 814; (C. C. A. 2nd Cir.) 145 F. 41.

559,446 Shade holding device, Forsyth & Forsyth, Jr., May 5, 1896, valid and not infringed (C. C. A. 2nd Cir.) 137 F. 911; not infringed (C. C., D. N. J.) 138 F. 734; (C. C. A. 3rd Cir.) 142 F. 750.

559,522 Sewage apparatus, A. S. Glover, May 5, 1896, not infringed (C. C., D. R. I.) 132 F.35; (C. C. A. 1st Cir.) 138 F.811; (C. C A. 1st Cir.) 146 F. 753.

559,647 Calcining furnace, A. A. Wethey, May 5, 1896, held to not infringe 471264 (C. C., D. Wash., N. D.) 110 F. 383.

559,670 See Reissue 11657.

559,827 Featherbone, Warren & Holden, May 12, 1896, valid, infringed (C. C., N. D Ill., N. D.) 133 F. 304; void (C. C. A. 7th Cir.) 141 F. 655.

559,878 Steroscope, H. S. Walbridge, May 12, 1896, held not to infringe 548149 (C. C. A. 2nd Cir.) 126 F. 373.

559,898 Coffin handle, W. Klein, May 12, 1896, held not to infringe 478168 (C. C., D. Conn.) 124 F. 897; (C. C. A. 2nd Cir.) 129 F. 128.

560,599 Apparatus for repairing asphalt pavement, A. A. Perkins, May 19, 1896, valid, infringed (C. C., N. D. Ill., N. D.) 96 F. 235; 183 U. S. 591.

560,705 Welt guide for sewing machine, Fowler & Warren, May 26, 1896, not infringed (C. C. A. 1st Cir.) 112 F. 146.

560,727 Car dumping machine, T. Long, 15 App. D. C. 284.

560,819 See Reissue 11664.

561,386 Means for heating looper of wax thread sewing machine, Z. T. French, June 2, 1896, not infringed (C. C. A.1st Cir.) 146 F. 759.

561,559 Rib knitting machine, D. C. Bellis, June 9, 1896, not infringed (C. C., N. D. N. Y.) 139 F. 137; claims 1, 3, 6 and 7 valid and infringed by 656535 (C. C. A. 2nd Cir.) 145 F. 915.

561,707 Safety razor, E. J. Fuchs, June 9, 1896, not infringed (C.C., S. D. N. Y.) 105 F. 622, 624; 109 F. 1064.

562,263 Winding machine, S. W. Wardwell, June 16, 1896, not infringed (C. C., D. Mass.) 136 F. 879.

562,395 Electric cigar lighter, Gruhlke & Kessler, June 23, 1896, void (C. C. A. 7th Cir.) 108 F. 412; held to infringe 492-913 (C. C. A. 2nd Cir.) 130 F. 342.

562,590 Duplicating stencil sheet, A. B. Dick, June 23, 1896, void (C. C., S. D. N. Y.) 105 F. 629; (C. C. A. 2nd Cir.) 108 F. 961.

562,616 Waistband for trousers, S. Katz, June 23, 1896, valid, infringed (C. C., S. D. N. Y.) 133 F. 310.

562,625 Grain cleaning device for thrashing machine, F. F. Landis, June 23, 1896, held to not infringe 401840 (C. C. A. 3rd Cir.) 100 F. 94.

562,940 Metallic seat or cushion, W. Vogler, Jnne 30, 1896, valid, infringed (C. C., D. Mass.) 107 F. 140.

563,163 Cushion for typewriter key, Graham & Savell, June 30, 1896, cited (C. C. A. 2nd Cir.) 145 F. 514.

563,164 Cushion for typewriter key, Graham & Savell, June 30, 1896, cited (C. C. A. 2nd Cir.) 145 F. 514.

563,664 See Reissue 11696.

564,174 Armored insulating electric conduit, R. T. Elwell, 15 App. D. C. 21.

564,975 Artificial asphaltum and process of making same, R. Dean, Aug. 4, 1896, valid and infringed (C. C., W. D. Pa.); Paragon Insulating Co. v. Pennsylvania Paraffine Works, decided Jan. 1903, not reported.

564,986 Pull off for shoe sewing machine, Fowler & Warren, Aug.4, 1896, not infringed (C. C , D. Mass.) 101 F. 990; (C. C. A. 1st Cir.) 110 F. 393; (C.C.A.1st Cir.) 112 F. 146.

565,263 Gas separator for use with pulp digester, V. Drewsen, Aug. 4, 1896, void (C. C A. 6th Cir.) 131 F. 734.

565,605 Shell extractor for gun, W. H. Davenport, Aug. 11, 1896, valid, infringed (C. C. A. 1st Cir.) 134 F. 869.

565,867 Cut-out for electric motor, E. P. Warner, Aug. 11, 1896, valid, infringed (C. C., E. D. Wis) 91 F. 650.

566,731 Glove fastener, G. E. Adams, Sept. 1, 1896, held to not infringe 412296 (C. C. A. 1st Cir.) 96 F. 489.

566,770 Water closet cistern, D. T. Kenney, Sept. 1, 1895, not infringed (C. C., S. D. N. Y.) 137 F. 431.

567,277 Cigar tip cutter, Lehmann & Brunhoff, Sept. 8, 1896, held to infringe 533207 (C. C., E. D. N. Y.) 101 F. 123.

567,748 Process of producing photographs in relief, T. C. Marceau, Sept. 15, 1896, held to not infringe 556591 (C. C., N. D. Cal.) 87 F. 871.

568,251 Perpetual ledger, H. H. Hoffmann, Sept. 22, 1896, held to not infringe 581123 (C. C. A. 7th Cir.) 104 F. 245.

568,816 Tubular bell, J. E. Treat, Oct. 6, 1896, void (C. C., S. D. N. Y.) 118 F. 853.

569,233 Music box, E. P. Reissner, Oct. 13, 1896, valid, infringed (C. C., D. N. J.) 106 F. 78.

569,903 Finger nail clipper, J. D. C. Wenger, Oct. 20, 1896, not infringed (C. C., D. Conn.) 136 F. 414; valid, claim 1 infringed, claim 2 not infringed (C. C. A. 2nd Cir.) 145 F. 348.

570,059 Circular knitting machine, J. E Rowe, Oct. 27, 1896, held not to infringe 461357 (C. C. A. 1st Cir.) 133 F. 527.

570,259 Lappet loom, J. R. McColl, Oct. 27, 1896, not infringed (C. C. D. Mass.) 87 F. 727, 731; (C. C. A. 1st Cir.) 95 F. 982, 987.

570,260 Lappet loom, J. R. MacColl, Oct. 27, 1896, not infringed (C. C , D. Mass.) 87 F. 731; (C. C. A. 1st Cir.) 95 F. 987.

570,451 Bitransit railway system, B. F. Carpenter, Nov. 3, 1896, void (C. C., S. D. N. Y.) 110 F. 749; (C. C. A. 2nd Cir.) 121 F. 747.

570,604 Brush making machine, W. Morrison, Nov. 3, 1896, valid, infringed (C. C., N. D. N. Y.) 111 F. 172.

571,102 Mold for shaping tooth crowns, L. L. White, Nov. 10, 1896, anticipated (C. C., N. D. Cal.) 117 F. 617.

571,121 Match safe, Huebel & Manger, Nov. 10, 1896, on motion to punish for contempt (C C., S. D. N. Y.) 146 F. 137.

571,508 Clamp for cloth stretching machine, H. W. Butterworth, Nov. 17, 1896, not infringed (C. C., D. R. I.) 117 F. 856.

571,535 Wood carving machine, E. Lochman, Nov. 17, 1896, held not to infringe 443802 (C. C. A. 7th Cir.) 126 F. 171.

571,604 Conveying belt idler pulley, T. Robins, Jr , Nov. 17, 1896, valid and infringed (C. C., E. D. Pa.) 142 F. 221; claims 5 and 6 valid and infringed (C. C. A. 3rd Cir.) 145 F. 923.

572,014 Fireproof blind, W. R. Kinnear, Nov. 24, 1896, valid, infringed by 682304 (C. C. A 2nd Cir.) 142 F. 970.

572,309 Winding machine, A. B. Morse, Dec. 1, 1896, claim 2 void (C C , D. Mass.) 136 F. 889.

573,107 Field magnet pole structure for dynamo, H. G. Reist, Dec. 15, 1896, void (C. C., S. D. O., W. D.) 146 F. 551

573,205 Gas stove, J. W. Carter, Dec. 15, 1896, not infringed (C. C., E. D. N. Y.) 136 F. 229; (C. C. A. 2nd Cir.) 144 F. 701.

573,532 Separable button, E. Pringle, Dec. 22, 1896, claims 3 and 4 void (C. C., N. D. N. Y.) 146 F. 136.

573,789 Hat box or trunk, M. Lyons, Dec. 22, 1896, void (C. C., S. D. N. Y.) 95 F. 154; (C. C. A. 2nd Cir.) 106 F. 416.

1897

574,894 Hat packing ring, F. P. Ferry, Jan. 12, 1897, valid, infringed (C. C., S. D. N. Y.) 129 F. 389

575,154 Stone-planing machine, J. Gilmour, Jan. 12, 1897, void (C. C. A. 2nd Cir.) 142 F. 967.

575,428 Braiding machine racer, O. E. Moore, Jan. 19, 1897, held to not infringe 432582 (C. C., D. Mass.) 100 F. 845.

575,641 Wire coupling, Gerard & Lawrence, Jan. 19, 1897, held to infringe 428123 (C. C. A. 6th Cir.) 97 F. 502.

577,516 See Reissue 11738.

577,835 Star wheel standard for music boxes, G. A. Brachhausen, Mar. 2, 1897, valid, infringed (C. C., S. D. N. Y.) 87 F. 478.

578,133 Folding mechanism for bag filling machine, B. F. Brown, Mar. 2, 1897, infringed (C. C., W. D. N. Y.) 140 F. 97.

578,514 Artificial billiard chalk, Hoskins & Spinks, Mar. 9, 1897, void (C. C. A. 7th Cir.) 108 F. 404.

578,707 Control mechanism for electric motor, F. R. Bacon, Mar. 16, 1897, held to infringe 565867 (C. C., E. D. Wis.) 91 F. 650.

579,857 Fifth wheel for wagon, W. H. Bradshaw, 16 App. D. C. 92.

580,000 Separable button, E. Pringle, Apr. 6, 1897, valid, infringed (C. C., S. D. N. Y.) 143 F. 523.

580,001 Separable button, E. Pringle, Apr. 6, 1897, not infringed by 645624 (C. C., S. D. N. Y.) 145 F. 536.

580,379 Shoe pegging machine, P. R. Condon, Apr. 13, 1897, held to not infringe 555434 (C. C., D. Mass.) 96 F. 336.

580,434 Telephone transmitter, Stromberg & Carlson, Apr. 13, 1897, valid, infringed (C. C. A. 7th Cir) 127 F. 704.

580,846 Automatic air brake triple valve, N. A. Christensen, 15 App. D. C. 94.

581,123 Perpetual ledger, L. M. Leslie, Apr. 20, 1897, claims 8 to 13 void (C. C., N. D. Ill., N. D.) 96 F. 237; not infringed (C. C. A. 7th Cir.) 104 F. 245.

581,251 Butt-weld tubing, P. Patterson, Apr. 20, 1897, void (C. C., W. D. Pa.) 125 F. 22; (C. C. A. 3rd Cir.) 135 F. 351.

581,887 Circular knitting machine, J. E. Rowe, May 4, 1897, held not to infringe 600671 and 600788 (C. C., D. R. I.) 121 F. 110; held not to infringe 461357 and 600671 (C. C. A. 1st Cir.) 133 F. 527.

582,762 Bottle sealing device, W. Painter, May 18, 1897, valid, infringed (C. C., S. D. N. Y.) 136 F. 199; void (C. C. A. 2nd Cir.) 136 F. 841.

583,308 Mechanical movement. R. Miehle, 18 App. D. C. 128.

583,320 Calculagraph, H. Abbott, May 25, 1897, valid, infringed (C. C., D. Mass.) 132 F. 20; infringed (C. C., D. Mass.) 136 F. 196. not infringed (C. C. A. 1st Cir.) 144 F. 91.

583,408 Machine for unloading and feeding sugar cane, J. Mallon, May 25, 1897, void or not infringed (C. C., D. Minn., 4th D.) 126 F. 377; valid, not infringed (C. C. A. 8th Cir.) 137 F. 68.

583,560 Log turner and loader, T. S. Wilkin, June 1, 1897, valid, infringed (C. C., W. D. Mich.) 131 F. 762.

583,585 Regulator for gas engine, Westinghouse & Rund, June 1, 1897, claim 2 void, claims 12 and 18 valid and infringed (C. C., W. D. Pa.) 127 F. 822; claims 12 and 18 void (C. C. A. 3rd Cir.) 135 F. 767.

584,177 Magazine gun, L. L. Hepburn, June 8, 1897, valid, infringed (C. C., D. Conn.) 139 F. 658; on application for preliminary injunction, claims 1, 2, 3, 4, 7 and 8 held infringed (C. C., D. Conn.) 140 F. 879; not infringed (C. C. A. 2nd Cir.) 145 F. 628.

584,407 Curette, E. D. St. Cyr, June 15, 1897, void or not infringed (C. C. A. 7th Cir.) 122 F. 449.

584,518 Check protector, C. E. Ongley, June 15, 1897, infringed (C. C., W. D. Pa.) 87 F. 748.

584,787 Rotary neostyle, H. W. Lowe, June 22, 1897, injunction dissolved (C. C. A. 2nd Cir.) 145 F. 933.

585,250 Combined electric fan and electrolier, E. H. Bennett, Jr., June 29, 1897, valid, infringed (C. C., S. D. N. Y.) 109 F. 566.

586,088 Incubator and brooder, W. B. Jones, July 6, 1897, not infringed (C. C , W. D. N. Y.) 115 F. 324; claims 1, 2, 3, 9 and 14 void (C. C. A. 2nd Cir) 126 F. 753.

586,193 See Reissue 11913.

586,953 Motion picture exhibition apparatus, Jenkins & Armat, July 20, 1897, valid, infringed (C. C., S. D. N. Y.) 118 F. 840.

587,237 Oxydonor, H. Sanche, July 27, 1897, validity or usefulness not established (C.C., S.D. Iowa, C.D.) 98 F. 103; valid, infringed (C. C., S. D. Iowa, C. D.) 102 F. 896; void (C. C. A. 8th Cir.) 111 F. 530.

587,441 Method of regulating electrically driven machinery, Knight & Potter, Aug. 3, 1897, not infringed (C. C., W. D. Pa.) 141 F. 994; valid, claims 1 and 2 infringed (C. C. A. 3rd Cir.) 146 F. 66.

587,442 Apparatus for regulating electrically driven machinery, Knight & Potter, Aug. 3, 1897, not infringed (C. C., W. D. Pa.) 141 F. 994; valid, claims 3, 4 and 9 infringed (C. C. A. 3rd Cir.) 146 F. 66.

587,573 Dynamo electric machine, V. A. Fynn, 16 App. D. C. 574.

587,633 Fastener for stair carpet, H. C. Adams, Aug. 3, 1897, void (C. C., S. D. N. Y.) 145 F. 352.

587,733 Electric controller, S. Harris, Aug. 10, 1897, held to infringe 428169 (C. C., S. D. N. Y.) 103 F. 641.

587,874 Barrel filter for metal solution, E. D. Sloan, Aug. 10, 1897, void (C. C. A. 8th Cir.) 139 F. 23.

588,648 Swaging machine, A. J. Morse, Aug. 24, 1897, held to infringe 492576 (C. C., D. Conn.) 97 F. 627; (C. C. A. 2nd Cir.) 101 F. 448.

588,722 Drawbar attachment for car, W. Thornburgh, Aug. 24, 1897, held not to infringe 460426 (C. C., E. D. Mich., S. D.) 123 F. 95; held to infringe 460426 (C. C. A. 6th Cir.) 124 F. 486.

589,168 Kinetographic camera, T. A. Edison, Aug. 31, 1897, valid, infringed (C. C., S. D. N. Y.) 110 F. 660; claims 1, 2, 3 and 5 void (C. C. A. 2nd Cir.) 114 F. 926. See Reissue 12037.

589,236 Crusher and pulverizer, M. F. Williams, Aug. 31, 1897, valid, infringed (C. C., E D. Mo., E. D.) 104 F. 795.

589,342 Tip for acetylene gas burner, E. J. Dolan, Aug. 31, 1897, valid, infringed (C. C., N. D. N. Y.) 124 F. 764; (C. C. A. 2nd Cir.) 128 F. 599; held infringed on motion for preliminary injunction (C. C., S. D. N. Y.) 135 F. 121.

589,579 Corset steel tipping machine, C. A. Seeley, Sept. 7, 1897, void (C. C., D. Conn.) 136 F. 411.

589,580 Corset steel tipping machine, C. A. Seeley, Sept. 7, 1897, void (C. C., D. Conn.) 136 F. 411.

589,676 Eyeglass case, R. L. Warren, Sept. 7, 1897, void or not infringed (C. C., E. D. Pa.) 91 F. 653; not infringed (C.C. A. 3rd Cir.) 93 F. 963.

590,297 Force feed lubricator, J. Buckley, Sept. 21, 1897, valid, infringed (C. C., S. D. N. Y.) 120 F. 952; not infringed (C. C. A. 2nd Cir.) 135 F. 520.

590,675 Ore concentrator, A. R. Wilfley, Sept. 28, 1897, valid, infringed (C. C., D. Colo.) 111 F. 760.

590,873 Last hinge, W. B. Arnold, Sept. 28, 1897, valid (C. C., D. Mass.); Arnold v. Mawhinney Last Co., No. 1333 of 1900, decree entered Apr. 27, 1901, not reported.

591,869 Electric transformer, W. S. Moody, Oct. 19, 1897, valid, infringed (C. C., S. D. N. Y) 123 F. 101; (C. C. A. 2nd Cir.) 130 F. 772.

592,134 Circular knitting machine, J. L. Eck, Oct. 19, 1897, held not to infringe 461357 (C. C., D. R. I.) 121 F. 110; valid, infringed (C. C., E. D. Pa.) 132 F. 758.

592,920 Engraving machine for etching glassware, H. C. Schrader, Nov. 2, 1897, valid and infringed by 645333 (C. C., N.D. W. Va.) 140 F. 161.

593,045 Daylight prism glass, G. K Cummings, Nov. 2, 1897, valid, infringed (C. C.. E. D. Pa.) 110 F. 980.

593,406 Machine for making and inserting wire coil fastener, J. H. Templin, Nov. 9, 1897, void (C, C., E. D. Pa.) 120 F. 295.

593,954 Chest and neck protector, J. H. Way, Nov. 16, 1897, void (C. C., E. D. Pa.) 91 F. 663; (C. C. A. 3rd Cir.) 96 F. 416; valid on demurrer (C. C., E. D. Pa.) 142 F. 552.

594,286 Mold for casting car wheels, E. R. Robinson, Nov. 23, 1897, valid, not infringed (C. C. A. 7th Cir.) 118 F. 438; void between parties (C. C., N. D. Ill.) 142 F. 170.

594,309 Base for clock, W. H. Wright, Nov. 23, 1897, void (C.C., D. Conn.) 87 F. 1000.

594,451 Bicycle saddle, B. F. Wheeler, Nov. 30, 1897, void (C.C., W. D. N. Y.) 122 F. 645.

594,700 Electric pleasure railway, L. Lilley, Nov. 30, 1897, held to not infringe 332762 and 367252 (C. C. A. 6th Cir.) 99 F. 90.

594,835 Cigar wrapper cutting machine, P. Veraci, Nov. 30, 1897, held to infringe 261849 and 315408 (C. C., S. D. N. Y.) 107 F. 290.

594,937 Caster socket, L. B. Denton, Dec. 7, 1897, void or not infringed (C. C., D. Conn.) 110 F. 976.

595,615 Sewing machine looper mechanism, J. E. Fefel, 17 App. D. C. 317.

595,688 Warp stop motion for loom, W. H. Baker, Dec. 21, 1897, valid, infringed (C. C., D. Mass.) 130 F. 28; not infringed (C. C. A. 1st Cir.) 132 F. 975.

595,696 Roller bearing, G. J. S. Collins, Dec. 21, 1897, valid, infringed (C. C. A. 8th Cir.) 122 F. 451.

595,728 Plaiting machine, F. W. Pause, Dec. 21, 1897, not infringed (C. C., S. D. N. Y.) 103 F. 948; (C. C. A. 2nd Cir.) 107 F. 488.

596,393 Music box, G. A. Brachhausen, Dec. 28, 1897, valid, infringed (C. C., D. N. J.) 106 F. 78.

1898

597,686 Store counter stool, A. R. Milner, Jan. 18, 1898, void (C. C. A. 6th Cir.) 111 F. 386; valid, infringed (C. C. A. 6th Cir.) 133 F. 916.

598,489 Electric cigar lighter, W. F. Kessler, Feb. 1, 1898, held to infringe 492913 (C. C. A. 2nd Cir.) 130 F. 342.

598,497 Paper bag machine, E. E. Claussen, Feb. 8, 1898, infringes 558969 (C. C., D. Me.) 142 F. 479, 517.

598,567 Can body machine, Holden & Brown, Feb. 8, 1898, not infringed (C. C., N. D. Cal.) 137 F. 86; not infringed by 712998 (C. C A. 9th Cir.) 142 F. 141.

599,191 Ornamental rope or cord, F. W. Oehrle, Feb. 15, 1898, not infringed (C. C., E. D. Pa.) 131 F. 487; (C. C. A. 3rd Cir.) 138 F. 561.

599,477 Bowling alley runway, E. Reisky, Feb. 22, 1898, valid, infringed (C. C. A. 2nd Cir) 111 F.904; anticipated (C.C., D. Minn., 3rd Div.) 115 F. 648; void (C. C., S. D. N. Y.) 126 F. 765; 128 F. 1023; (C. C. A. 2nd Cir.) 131 F. 255.

599,482 Breech loading ordnanc, V. C. Tasker, 21 App. D. C. 64.

599,631 Device for making photographic films, H. M. Reichenbach, 17 App. D. C. 333.

599,892 Electric regulator for dynamo, W. H. Chapman, Mar.1,1898, held to not infringe 535158 (C. C., D. Me.) 105 F. 63; (C. C. A. Ist Cir.) 115 F. 711.

600,114 Separable button, E. Pringle, Mar. 1, 1898, held to infringe 325430 (C. C., N. D N. Y.) 95 F. 168; (C.C.A.2nd Cir.) 100 F. 984.

600,186 Fireproof window, F. Voightmann, Mar. 8, 1898, claims 5, 6 and 7 void (C. C., W. D. Mo., W. D.) 133 F. 298; (C. C., N. D. Ill.) 133 F. 934; (C. C. A. 7th Cir.) 138 F. 56.

600,475 Electrical petticoat insulator, J. W. Boch, Mar. 8, 1898, valid, infringed (C. C., D. N. J.) 111 F. 923; 114 F. 407; 17 App. D C. 75.

600,761 Thickening thread and take up mechanism for knitting machine, A. N. Ames, Mar. 15, 1898, not infringed (C. C., D. R. I.) 121 F. 110; (C. C. A. 1st Cir.) 133 F. 527.

600,782 Weeding machine, Hallock & Hallock, Mar. 15,1898, valid, infringed (C. C., N. D. N. Y.) 107 F 482; valid and infringed on motion for injunction (C.C., N. D. N.Y.) 124 F. 226; 128 F. 1020.

600,788 Thread feeding mechanism for knitting machine, W. R. Johns, Mar. 15, 1898, not infringed (C. C., D. R. I.) 121 F. 110; construed (C. C. A. 1st Cir.) 133 F. 527.

601,389 Automatic lamp black machine, J.J. Williams, Mar.29,1898, preliminary injunction denied (C.C., N.D.W.Va.) 143 F. 550.

601,405 Brush, R. B. Shepherd, Mar. 29, 1898, valid, infringed (C. C., S. D. N. Y.) 138 F. 83; not infringed (C. C. A. 2nd Cir.) 146 F. 756.

601,524 Conveying pipe for dredging machine, J. R. Parker, Mar.29, 1898, held to infringe 318859 and 318860 (C. C., N. D. Cal.) 99 F. 745.

602,179 Game board, H. L. Haskell, Apr. 12,1898, not infringed (C. C., S. D. N. Y.) 119 F. 937; claim 1 void, claims 3 and 6 not infringed (C. C. A. 2nd Cir.) 127 F. 155.

603,619 Paper decorations, R. Burger, May 10, 1898, not infringed (C. C., S D. N. Y.) 119 F. 372.

603,690 Curtain stretcher, R. Hoffheins, May 10, 1898, does not infringe 617813 (C. C. A. 7th Cir.) 145 F 179.

603,738 Bagatelle board, M. Redgrave, May 10, 1898, void (C. C., S. D. N. Y.) 120 F. 306.

603,992 Process and apparatus for printing carpet yarn, C.L.Horack, May 10,1898, invalidity questioned (C.C.,S.D.N.Y.) 109 F. 328.

604,191 Vessel for administering volatile liquids, P. P. Monnet, May 17, 1898, valid, infringed (C. C., E. D. N. Y.) 131 F. 765.

604,233 Double tube injector, J. Huber, May 17, 1898, held to not anticipate 614752 (C. C,, S. D. N. Y) 98 F. 298.

604,338 Art of treating tobacco leaves, Rickard & Long, May 17, 1898, not infringed (C. C.. D. Conn.) 97 F. 96; void (C. C. A. 2nd Cir.) 103 F. 868.

604,346 Dress skirt and wardrobe trunk, S. W. Bonsall, May 17, 1898, valid, claim 3 infringed (C. C., S. D. N. Y.) 139 F. 399.

604,465 Electric meter, T. Duncan, May 24,1898, valid between parties (C. C. A. 7th Cir.) 142 F. 157.

604.690 Fountain pen, L. E. Waterman. May 24, 1898, valid (C. C., S. D. N. Y.) 99 F. 564; void (C. C., S D. N. Y.) 121 F. 103, claims 8 and 9 infringed, claims 17 to 26 void (C. C.. D. Mass.) 123 F. 303; claims 8, 9 and 17 to 26 void (C. C. A. 1st Cir.) 125 F. 497.

605,056 Abrading shoe for truing up car wheels, W. M. Hoffman, May 31, 1898, valid, infringed (C. C., W. D. N. Y.) 124 F. 902.

605,138 Barrel washer, G. Schock, June 7, 1898, not infringed (C.C., N. D. Ill., E. D.) 145 F 633.

605,177 Inkstand, E. Davis, June 7, 1896, not infringed (C. C., E. D. N. Y.) 115 F. 333; valid, infringed (C.C.A. 2nd Cir.) 120 F. 941.

605,710 Process for ornamenting plush, G. B. Goodall, June 14,1898, void (C. C. A. 1st Cir.) 119 F. 355.

606,044 Mechanical movement for washing machine, H.F.Brammer, June 21, 1898, held to infringe 535465 (C. C.|A. 8th Cir.) 106 F. 918.

606,096 Mechanical movement for printing machine, L. W. Southgate, June 21, 1898, held to not infringe 317663 (C.C.A. 7th Cir.) 102 F. 159.

606,435 Gas generating gas fixture, J. F. Williams, June 28, 1898, not infringed (C. C. A. 7th Cir.) 97 F. 87.

606,994 Match machine, A. Kelley, July 5, 1898, held to infringe 389435 (C. C., D. N. J.) 127 F. 341.

607,433 Milk can, H. B. Haigh, July 19, 1898, valid, infringed (C. C.. S. D. N. Y.) 138 F. 123; preliminary injunction denied (C. C., S. D. N. Y.) 140 F. 108; not infringed (C.C. A. 2nd Cir.) 143 F. 512.

607,602 Machine for cutting shoe shank stiffeners, G. E. M. Lewis, July 19, 1898, claim 3 void (C. C., D. Mass.) 122 F. 470; void (C C. A. 1st Cir.) 125 F. 378.

607,620 Pipe elbow, W. A. Kemp, July 19, 1898, void (C. C. A. 7th Cir.) 137 F 399.

607,719 Process of recovering precious metals from solutions, M. E. Waldstein, July 19, 1898, void (C. C., D. Idaho) 110 F. 538; (C. C. A. 9th Cir.) 117 F. 240.

608,096 Process of making wire glass, L. Appert, July 26, 1898, held anticipated (C. C., W. D. Pa.) 144 F. 115.

608,108 Raisin seeder, C. S. Cox, July 26, 1898, held to infringe claims 1 to 5 but not to infringe claims 6 to 8 of 543834 (C. C., N. D. Cal.) 94 F 845.

608,143 Blast furnace casting apparatus, M. Killeen, July 26, 1898, valid, infringed (C. C., W. D N. Y.) 140 F. 33.

608,146 Bicycle bell, W. H. Barker, July 26, 1898, held to not infringe 491012 (C. C., D. Mass.) 96 F. 229; (C C. A. 1st Cir.) 98 F. 892.

608,220 Mechanical movement for washing machine, A. Plagman, Aug. 2, 1898, valid, infringed (C. C. A. 8th Cir.) 138 F. 396.

608,720 Collar turning and ironing machine, W. C. Shaw, Aug. 9, 1898, valid, infringed (C. C., D. Conn.) 103 F. 796; infringement questioned (C. C. A. 2nd Cir.) 107 F. 719; (C. C., D. Conn.) 117 F. 322; infringed (C. C. A. 2nd Cir.) 123 F. 878.

609,396 Brake beam, F. B. Aglar, Aug. 23, 1898, held to infringe 361009, held to not infringe 466984, 480194 and 486218 (C. C. A. 8th Cir) 106 F. 693.

609,513 Veneer cutting machine, G. E. M. Lewis, Aug. 23, 1898, not infringed (C. C., D Mass.) 122 F. 476; (C. C. A. 1st Cir.) 125 F. 382

609,928 Thill coupling, C. C. Bradley, Aug. 30, 1898, valid, infringed (C C., N. D N. Y.) 122 F. 867; (C. C. A. 2nd Cir.) 126 F 945; not infringed (C C. A. 2nd Cir.) 139 F. 447.

611,181 Trace trimmer, L. L. Miller, Sept 20, 1898, held to not infringe 380296 (C. C. A. 6th Cir.) 104 F. 355.

613,195 Breech loading rapid fire gun, Driggs & Tasker, Oct. 25, 1898, held to infringe 360798 (C. C., D. Conn.) 99 F 996; (C. C. A. 2nd Cir.) 114 F. 936.

613,208 Cotton seed delinter, W. C. Johnson, Oct. 25, 1898, void (C. C. A 6th Cir.) 141 F. 73.

613,217 Tympan for printing press, A. S. Allen. Oct. 25, 1898, held to not infringe 549691 (C. C.. S D. N. Y.) 113 F. 581.

613,218 Platen for printing press, A. S. Allen, Oct. 25, 1898, held to not infringe 549691 (C. C., S. D. N. Y.) 113 F. 581

613,219 Platen for printing press, A. S. Allen, Oct. 25, 1898, held to not infringe 549691 (C. C., S. D. N. Y.) 113 F. 581.

613,220 Tympan for printing press, A. S. Allen, Oct. 25, 1898, held to not infringe 549691 (C. C., S. D. N. Y.) 113 F. 581.

613,221 Make-ready device for printing press, A. S. Allen, Oct. 25, 1898, held to not infringe 549691 (C. C., S. D. N. Y.) 113 F. 581.

613,371 Sheet metal bottle closure, Hoffman & Frist, 18 App. D. C. 1.

613,648 Lamp, F. A. Cortis, Nov. 1, 1898, not infringed by 781613 (C. C,, S. D. N. Y.) 145 F. 516.

613,844 Bogus coin detector for vending machine, M. B. Mills, Nov. 8, 1898, valid (C. C. A. 7th Cir.) 120 F. 274.

613,853 Electric regulator, W. H. Chapman, Nov. 8, 1898, held to not infringe 535158 (C. C., D. Me.) 105 F. 63; (C. C. A. 1st Cir.) 115 F. 711.

614,279 Pivoted or tilting bin, E J. Walker, Nov. 15, 1898, valid, infringed (C. C., E. D. Pa) 110 F. 649; (C. C., Ed. Pa.) 132 F. 823; (C. C A. 3rd Cir.) 139 F. 134; on exceptions to master's ruling (C. C., E. D. Pa.) 146 F. 249.

614,752 Injector, Park & Williston, Nov. 22, 1898, valid' infringed (C. C., S. D N. Y.) 98 F. 298

614,973 Buttonhole sewing machine, F. W. Ostrom, 23 App.D.C.69.

615,073 Mattress frame, J. P. Lein, Nov. 29, 1898, valid, infringed (C. C., S. D. N. Y.) 97 F. 607; claim 1 void (C C.A. 2nd Cir.) 105 F 962.

615,727 Grain drill, P. P. Mast, Dec. 13, 1898, held to infringe 557-868 (C. C. A 6th Cir.) 115 F. 886.

615,999 Fire escape, W. H. Logan. Dec. 15, 1898, not infringed (C. C. A. 7th Cir) 116 F. 359.

616,348 Computing scale, O. O. Ozias, Dec. 20, 1898, not infringed (C. C. A. 6th Cir.) 126 F. 639.

616,425 Hydrocarbon burner, H. Ruppel, Dec. 20, 1898, valid, infringed (C C., E. D. N Y.) 133 F. 47.

1899

617,291 Oil burner, W. R. Jeavons, Jan. 3, 1899, not infringed (C. C., E. D. N. Y.) 133 F 47.

617,592 Electric hand lamp, D. Misell, Jan. 10, 1899, valid, infringed (C. C.. S. D. N. Y.) 98 F. 895; claim 3 void (C. C., S. D. N. Y.) 108 F 957; (C. C A. 2nd Cir.) 113 F. 877; void (C. C., S. D. N. Y) 131 F. 495; (C. C. A. 2nd Cir.) 137 F. 913.

617,691 Telephone switchboard, J. M. Overshiner, Jan. 10, 1899, held to infringe 521461 (C. C. A. 7th Cir.) 131 F. 75.

617,692 Telephone switchboard, J. M. Overshiner, Jan. 10, 1899, held to infringe 521461 (C. C. A. 7th Cir.) 131 F. 75.

617,813 Curtain stretching frame, W. A. Mayo. Jan. 17, 1899, not infringed by 603690 and 676895 (C. C. A. 7th Cir.) 145 F. 179.

617,942 Acetylene gas burner, H. E. Shaffer, Jan. 17, 1899, not infringed (C. C., S. D. N. Y.) 131 F. 94; void (C. C. A. 2nd Cir.) 142 F. 745.

619,148 Water wheel, W. A. Doble, Feb. 7, 1899, does not infringe 633962 (C. C., N. D. Cal.) 141 F. 661.

619,149 Water wheel, W. A. Doble, Feb. 7, 1899, does not infringe 633962 (C C , N. D. Cal.) 141 F. 661.

619 567 Face plate for coffins, W. Hamilton, Feb. 14, 1899, void (C. C., S. D. N. Y.) 127 F. 158.

619,707 Shoe heel attaching machine, F. F. Raymond, Feb. 14, 1899, valid, infringed (C C., D. Mass.) 118 F. 163.

620,036 Multiplying camera, J. W. Jenkins, Feb. 21, 1899, valid, infringed (C. C., W. D. Pa.) 135 F 550; not infringed (C. C. A. 3rd Cir.) 138 F. 404.

620,125 Book typewriter, Hatch & Hellard, Feb. 28, 1899, held to not infringe 477517 (C. C. A. 2nd Cir.) 108 F. 628.

620,278 Shoe upper, G W. Chase, Feb. 28, 1899, claim 3 void (C. C. A. 1st Cir) 108 F. 399.

620,353 Grinding device for carding engine, L. W. Penney, Feb. 28, 1899, held to not infringe 464029 (C. C , D. Mass.) 114 F. 497; (C. C. A. 1st Cir) 122 F. 632.

621,025 Automatic music box, G A. Brachhausen, Mar. 14, 1899, valid, infringed (C. C., D. N. J.) 106 F. 78.

621,134 Skirt protector, J. B. Poyet, Mar 14, 1899, valid, infringed (C. C., E. D. Pa.) 105 F. 968.

621,219 Ball bearing, G. A. Burwell, Mar. 14, 1899, held to infringe 595696 (C. C. A. 8th Cir.) 122 F. 451.

621,423 Boot tree, L. H. Leadam, Mar. 21, 1899, valid and infringed (C. C , S. D. N. Y.) 140 F. 611.

621,974 Box or carton for biscuit, crackers, etc., F. M. Peters, Mar. 28, 1899, valid, infringed (C. C., E. D. Mo., E. D.) 120 F. 679; void (C. C. A. 8th Cir) 125 F. 601; valid on demurrer (C. C., N. D. Ill., E. D.) 142 F. 779.

622,159 Bicycle bell, Mossberg & Brink, Mar. 28, 1899, held to infringe 491012 (C. C., D. Mass) 116 F. 488; (C. C., D. Mass.) 128 F. 55.

622,247 Lubricated bearing for electric motor, C. R. Meston, Apr, 4, 1899, valid, infringed (C. C., E. D. Mo., E.D) 116 F,974.

622,251 Pipe section holding device for riveters, R. S. Moore, Apr. 4, 1899, valid, infringed (C C., N. D. Cal.) 118 F. 602.

622,834 Golf ball, Work & Haskell, Apr. 11, 1899, infringed (C. C., S. D. N. Y.) 143 F. 128.

622,889 Sheet material for packing, matting, etc., J. B. Forsyth, Apr. 11, 1899, valid, infringed (C. C. A. 1st Cir.) 142 F. 461.

623,417 Stove damper, Ohnemus & Sauner, Apr. 18, 1899, held to infringe 493548 (C. C , N. D. Ia., E. D.) 111 F. 182; held to not infringe 493548 (C. C. A. 8th Cir.) 117 F. 830

623,857 Card index or record, S. T. Williams, Apr. 25, 1899, void (C. C , D. Mass.) 134 F. 886.

623,899 Cash and package carrier, E. C. Gipe, Apr. 25, 1899, held to infringe 465967 (C. C. A. 7th Cir.) 123 F. 416.

623,933 Bowling alley, W. H. Wiggins, Apr. 25, 1899, void on motion for injunction (C.C , S. D. N. Y.) 124 F. 554; valid and infringed (C. C., S. D. N. Y.) 145 F. 353.

624,597 Card index or record, S. T. Williams, May 9, 1899, void (C. C., D. Mass.) 134 F. 886

624,828 Fireproofing building material, A. Lantzke, May 9, 1899, not infringed (C. C , E. D. Pa.) 103 F. 316.

624,839 Ham boiling wrapper, Merrill & Lepper, May 9, 1899, not infringed (C. C., E D. Pa.) 105 F. 975; infringed (C. C. A. 3rd Cir.) 113 F. 627.

625,961 Railway switch, A. A. Strom, May 30, 1899, held not to infringe 651413 (C. C. A. 7th Cir.) 125 F. 748

626,207 Wire bustle, H H Keil, May 30, 1899, priority over 617452 not established (C. C., D. Conn.) 103 F. 795.

626,212 Food chopper, L. T. Snow, May 30, 1899, void (C. C., E.D. Pa.) 118 F. 54.

626,625 Curette, V. May, June 6, 1899, held not to infringe 584407 (C. C. A. 7th Cir.) 122 F. 449.

626,667 Electric sign, C. A. Chase, June 13, 1899, valid and infringed (C. C., E. D. Pa.) 144 F. 431.

626,831 Car seat, H. S. Hale June 13, 1899, held not to anticipate 648927 (C. C., E. D. Pa) 126 F. 653.

626,927 Incandescent lamp socket, C. G. Perkins, June 13, 1899, valid, infringed (C. C , E. D. Pa.) 129 F. 134; (C.C.A.3rd Cir.) 135 F. 90.

626,997 Heating stove, J. B. Howard, June 13, 1899, valid and infringed (C. C. A. 6th Cir.) 143 F 889.

627,732 Silo, G. D. Harder, June 27, 1899, not infringed (C. C., E. D. Pa.) 121 F. 98; infringed (C. C. A. 3rd Cir.) 126 F. 487.

627,889 Collar ironing and shaping machine, W. J. Asher, June 27, 1899, held to infringe 608720 (C. C., D. Conn.) 117 F. 322; (C C. A. 2nd Cir.) 123 F. 878

627,898 Motor truck for street car, G. M Brill, June 27, 1899, valid, infringed (C. C., D. N. J.) 124 F. 778; not infringed (C. C. A. 3rd Cir.) 134 F 580.

627,900 Street car truck, G. M. Brill, June 27, 1899, valid, infringed (C. C., D N. J) 124 F. 778; not infringed (C. C. A. 3rd Cir.) 134 F. 580.

628,176 Tabulating machine, D. E. Felt, July 4, 1899, valid and infringed (C C., N. D. Ill., E. D.) 142 F. 539; claims 1, 2 and 4 void (C C. A. 7th Cir.) 146 F. 981.

628,253 Wire fence making machine, Pendergast & Whidden, July 4, 1899, infringed (C. C., D. Minn , 4th D.) 126 F. 381.

628,640 Harmonica, F. Strauss, July 11, 1899, void (C C., S. D. N. Y.) 108 F. 841.

628,886 Lock rod for cards, D. E. Hunter, July 11, 1899, claim 4 valid and infringed (C. C., D. Mass.); Library Bureau v. Yawman & Erbe Mfg. Co., decided Jan. 3, 1906, not reported; reversed by C. C. A. 1st Cir., July 5, 1906, not reported.

628,982 Electric cigar lighter, A. C. Gruhlke, July 18, 1899, held to infringe 492913 (C. C. A. 2nd Cir.) 130 F. 342.

629,202 Drying kiln, W. B. McHenry, 19 App. D. C. 158.

629,391 Hose supporter, R. W. Parramore, July 25, 1899, not infringed (C. C., D. Conn) 105 F. 965; infringed (C.C.A. 2nd Cir.) 114 F. 97; void (C. C., N. D. Ill., N. D.) 125 F. 19; (C. C. A. 7th Cir.) 133 F.228; (C. C. A. 2nd Cir.) 143 F. 516.

629,574 Can capping machine, Letson & Burpee, July 25, 1899, held to infringe 376804 (C. C., D. Wash., N. D.) 119 F. 599; (C. C. A. 9th Cir.) 130 F. 129.

630,972 Stick pin retainer, G. J. Capewell, Aug. 15, 1899, void (C. C., S. D. N. Y.) 138 F. 682.

631,033 Mirror mounting, Wright & Curry, Aug. 15, 1899, valid, infringed (C. C. A. 7th Cir.) 121 F. 80; valid, claims 3, 4, 5 and 6 infringed (C. C., W. D. Pa.) 140 F. 872; (C. C. A. 3rd Cir) 146 F. 749.

631,518 Electric motor or generator, J. Burke, Aug. 22, 1899, valid and infringed (C. C., S. D. N. Y.) 140 F. 866.

631,545 Fire hydrant, C E Loetzer, Aug. 22, 1899, valid, infringed (C. C., S. D. N. Y.) 127 F. 355; claims 8, 12 and 14 infringed, claim 2 not infringed (C. C. A. 2nd Cir.) 135 F. 537.

632,180 Body bolster for railway car, T. M. Gallagher, 21 App. D. C. 88.

632,527 Stamp canceling machine, G. W. Hey, Sept. 5, 1899, not infringed (C. C., D. Mass.) 141 F. 969.

632,994 Shoe last joint, A. G. Fitz, Sept. 12, 1899, held not to infringe 388830 (C. C. A. 1st Cir.) 133 F. 394.

633,184 Tangential water wheel, W. A. Doble, Sept. 19, 1899, does not infringe 454698 (C. C., N. D. Cal.) 142 F. 520.

633,675 Weighing and package filling machine, G. W. Watson, 23 App. D. C. 65.

633,772 Automatic circuit breaker, Wright & Aalborg, Sept. 26, 1899, not infringed (C. C., E. D. Pa.) 136 F. 217; claims 2 and 5 valid and infringed (C. C. A. 3rd Cir.) 143 F.966.

633,941 Dredger for pulverulent material, J. W. Arrott, Jr., Sept.26, 1899, not anticipated (C. C., W. D. Pa.) 131 F. 457.

633,962 Water wheel casing, W. J. Krase, Sept. 26, 1899, not infringed (C. C., N. D. Cal.) 141 F. 661.

634,042 Pneumatic carpet renovator, J. S. Thurman, Oct.3,1899,held not to infringe 521174 (C. C. A. 7th Cir.) 125 F. 761.

1899 (Concluded) 634,295—644,464

634,295 Incandescent lamp reflector, W. Goodchild, Oct. 3,1899,void (C. C , S. D. N. Y.) 143 F. 348.

634,556 Water still, J. W. Hale, Oct. 10, 1899, not infringed (C. C. A. 6th Cir.) 127 F. 964.

634,633 Machine for coating confectionery, W. H. Weeks, Oct. 10, 1899, held to infringe 492205 (C. C., S. D. N. Y.) 129 F. 919; does not infringe 492205 (C. C. A. 2nd Cir.) 142 F. 978.

634,838 Acetylene gas burner, H. E. Schaffer, Oct. 10, 1899, not infringed (C. C., S. D. N. Y.) 131 F. 94; void (C.C.A. 2nd Cir.) 142 F. 745.

636,885 Blast furnace casting apparatus, F. E. Bachman, Nov. 14, 1899, held to infringe 608143 (C. C., W. D. N. Y.) 140 F. 33.

636,922 Composition for sealing fruit can, A. Propfe, Nov. 14, 1899, held to infringe 307746 (C. C., E. D. Pa.) 105 F. 951.

638,540 Abdominal pad and hose supporter, E. F. Young, Dec. 5, 1899, valid, infringed (C. C., S. D. N. Y.) 120 F.956; (C. C. A. 2nd Cir.) 130 F. 891.

638,669 See Reissue 12085.

639,222 Spring bed and seat bottom, J. F. Gail, Dec. 19, 1899, not infringed (C. C., N. D Ga.) 131 F. 278; not infringed by 745345 (C. C. A. 5th Cir.) 140 F. 606.

639,395 Machine for making bottle wrapper, C. G. Biedinger, Dec. 19, 1899, void (C. C. A. 6th Cir.) 139 F. 556.

640,013 Method of assimilating printed and typewritten work, S. A. Neidich, Dec. 26, 1899, not invalid (C. C., S. D. N. Y.) 108 F. 266.

640,058 Calcining furnace, A. H. Wethey, Dec. 26, 1899, held to not infringe 471264 (C. C., D. Wash., N. D.) 110 F. 383.

1900

640,902 Gang edger, D. B. Hanson, 19 App. D. C. 559.

641,528 Stocking singeing machine, R. Meyer, 21 App. D. C. 26.

642,059 See Reissue 11980.

642,075 Receptacle for clothing, S. W. Bonsall, Jan. 30, 1900, valid, claim 4 infringed (C. C., S. D. N. Y.) 139 F. 399.

643,493 Stage appliance, I. M. Fuller, Feb. 13, 1900, valid, on motion for injunction (C. C., S. D. N. Y.) 121 F. 129.

644,367 Acid proof lining for pulp digester, R. Panzl, Feb. 27, 1900, valid, infringed (C. C., N. D. N. Y.) 132 F. 607; claims 1 and 2 void, claim 3 valid, infringed (C. C. A. 2nd Cir.) 138 F. 48.

644,464 Artificial leg suspender, J. F. Rowley, Feb. 27, 1900, valid, infringed (C. C., N. D. Ill., N. D.) 135 F. 363.

644,532 Cotton elevator and gin feeder, S. D. Murray, Feb. 27, 1900, validity questioned, not infringed (C. C., D. Del.) 141 F. 126.

644,736 Lemon juice extractor, J. L. Easley, Mar. 6, 1900, does not infringe 415048 (C. C. A. 7th Cir.) 145 F. 175.

645,026 Locomotive valve and cylinder lubricator, H. Woods, Mar. 6, 1900, valid and infringed, not anticipated by 267430 (C. C., N. D. N. Y.) 146 F. 252.

645,333 Engraving machine for etching glassware, G. Schiffbauer, Mar. 13, 1900, infringes 592280 (C. C., N. D. W. Va.) 140 F. 161.

645,505 Safety lock for package carrier, E. C. Gipe, Mar. 13, 1900, held to infringe 465967 (C C. A. 7th Cir.) 123 F 416.

645,624 Separable button, H. Kerngood, Mar. 20, 1900, does not infringe 580001 (C. C., S. D. N. Y.) 145 F. 536.

645,818 Disk harrow, A Lindgren, Mar. 20, 1900, held not to infringe 416346 (C C. A. 8th Cir) 121 F. 835.

645,871 Folding machine for cuff blanks, etc., J. K. P. Pine, Mar. 20, 1900, valid infringed (C. C., N. D N. Y.) 138 F.136.

645,906 Divided last, W. B. Arnold, Mar. 30, 1900, valid (C. C., D. Mass.); Arnold v. Mawhinney Last Co., No.1333 of 1900, decree entered Apr. 27, 1901, not reported.

646,149 Hoof pad for horse, W. J. Kent, Mar. 27, 1900, valid, infringed (C. C., S. D. N. Y.) 138 F. 899.

647,298 Apparatus for racking beer, R. H. Gangwisch, Apr. 10, 1900, preliminary injunction denied (C. C., N. D. Ill , E D.) 145 F. 643.

647,415 Pneumatic tool, J. Keller, Apr 10, 1900, held to not infringe 537629 (C. C., E. D. Pa.) 110 F.217; held not to infringe 364081 (C. C., S. D. N. Y.) 123 F. 891; held to infringe 537629 (C. C A. 3rd Cir.) 127 F. 130.

647,934 Manifolding sales book and holder, W. F. Beck, Apr. 24, 1900 claims 2 and 3 void (C. C. A. 9th Cir.) 117 F. 255; void (C. C , W. D. N. Y.) 125 F. 499; valid and infringed (C. C., W. D. N. Y.) 145 F. 939.

648,309 Elevator guard, W. W. C. Spencer, Apr 24, 1900, void (C. C. C. A. 7th Cir.) 130 F. 888.

648,674 Folding device for envelope machine, J. A. Sherman; May 1, 1900, held not to infringe 420792 (C. C. A 1st Cir.) 122 F. 464.

648,927 Handhold on car seat back, G. H. Davis, May 8, 1900, valid, infringed (C. C., E. D. Pa) 126 F. 653.

648,935 Apparatus for reproducing phonograph record, T. A. Edison, 21 App. D. C. 527

649,267 Adjustable railroad switch rod, F. B. Bradley, May 8, 1900, held not to infringe 457905 (C. C. A. 7th Cir) 118 F. 733.

649,864 Paste cup, W. Rodiger, May 15, 1900, void (C. C., S. D. N. Y.) 126 F. 960.

650,129 Drip coffee pot, C. Lewis, May 22, 1900, not infringed (C. C., D. Minn.) 127 F. 828; valid, infringed (C. C. A. 8th Cir.) 138 F. 63.

650,438 Ribbon mechanism for typewriter, H. L. & F. X. Wagner, May 29, 1900, not infringed (C. C., S. D. N. Y.) 144 F. 405.

650,771 Plow, G. C. Avery, May 29, 1900, claims 2 to 6 void, claims 7 and 8 valid, not infringed (C. C., E. D. Wis.) 139 F. 878.

651,276 Vehicle hub, E. Sendelbach, June 5, 1900, awarded priority (C C. A. 7th Cir.) 146 F. 758; 22 App. D. C. 168. See Reissue 12203.

651,413 Railway switch rod, T. E. Calvert, June 12, 1900, not infringed (C. C. A. 7th Cir.) 125 F. 748.

651,658 Toy wagon or child's cart, J. Flindall, June 12, 1900, not infringed (C. C., N. D. Ill.); J. Flindall v. The Fair, decided July 12, 1906, not reported.

652,107 Ticket holder, G. Hauser, 19 App. D. C. 401.

652,226 Method of making open-hearth steel, A. Monell, 23 App. D. C. 108.

652,407 Garment fastener, A. M. K. Steel, June 26, 1900, infringed (C. C., W. D. N. Y.) 124 F.761; valid, not infringed (C. C. A. 2nd Cir.) 130 F. 886.

652,542 Broom case, S. C. Lay, June 26, 1900, void (C. C. A. 7th Cir.) 120 F. 831.

652,730 Lamp chimney, R. Marsh June 26, 1900, suit on assignment (C. C., D Mass.) 144 F.132; not infringed by 791355 (C. C., S D. N. Y) 145 F. 516.

653,425 Transplanting machine, C Moehring, July 10, 1900, held not to infringe 486200 (C. C. A. 7th Cir.) 121 F. 85.

653,967 Silo E. F. Schlichter, July 17, 1900, held not to infringe 627732 (C. C., E. D. Pa) 121 F. 98; held to infringe 627732 (C. C. A. 3rd Cir.) 126 F. 487.

654,794 Match making machine, A Kelley, July 31, 1900, held to infringe 389435 (C. C., D. N. J) 127 F. 341.

654,843 Saw support and guide, H. P. Schofield, July 31, 1900, void (C. C. A. 7th Cir.) 142 F. 468.

654 844 Saw sharpening machine, H P. Schofield, July 31,1900,void (C. C. A. 7th Cir.) 142 F. 468.

654,845 Saw support, H. P. Schofield, July 31, 1900, void (C. C. A. 7th Cir.) 142 F. 468.

655,440 Friction clutch, F. G. Hobart, Aug. 7, 1900, void (C. C., D. Minn , 3rd Div.) 115 F. 720; claims 3, 4 and 5 valid, infringed, claim 6 void (C. C. A. 8th Cir.) 123 F. 79.

656,535 Circular knitting machine, M. J. Fisher, Aug. 21, 1900, held not to infringe 561559 (C. C., N. D. N. Y.) 139 F. 137; infringes 561559 (C. C. A. 2nd Cir.) 145 F. 915.

658,114 Flue construction for steam motor carriage, R. C. Mudge, 24 App D. C. 282.

658,888 Wood distilling apparatus, C W. Bilfinger, Oct. 2, 1900, not infringed (C. C., W. D. N. C.) 129 F. 131.

659,200 Boiler stoker, T. Ascencio, 24 App. D. C. 105.

659,315 Shade fixture, J. W. Patterson, Oct. 9, 1900, not infringed (C. C., D N. J.) 138 F. 734; (C. C. A. 3rd Cir.) 142 F. 750.

659,382 Hay loader, F. N. Trissell, 23 App. D. C. 219.

659,442 Pneumatic regulator for musical instrument, W. B. Fleming, Oct. 9, 1900, infringes 552796 (C. C. A. 9th Cir.) 143 F. 880.

659,840 Cotton seed delinter, W. C. Baxter, Oct. 16, 1900, held to infringe 503103 (C. C. A. 5th Cir.) 128 F. 709.

660,228 Storage battery plate, E. A. Sperry, Oct. 23, 1900, held to infringe 337299 (C. C., N. D. N. Y.) 112 F. 538.

660,277 Edge ironing machine, W. H. Rickey, Oct. 23, 1900, held not to infringe Reissue 11664 and 678949 (C. C. A. 2nd Cir.) 127 F. 325.

661,177 Process of vulcanizing rubber, W. G. Hill, Jr., Nov. 6, 1900, awarded priority in interference, 27 App. D. C. 291.

661,178 Process of vulcanizing rubber, W. G. Hill, Jr., Nov. 6, 1900, awarded priority in interference, 27 App D. C. 291.

661,334 Ink-well, F. M. Ashley, Nov. 6, 1900, held to infringe 605-177 (C. C. A. 2nd Cir.) 120 F. 941.

661,947 Accessible garment hanger, S. W. Bonsall, Nov. 20, 1900, void (C. C., S. D. N. Y.) 139 F. 399.

662,656 Trousers hanger, L F L. Pynchon, Nov. 27, 1900, not infringed (C. C., D. Conn.) 114 F. 653.

663,943 Pneumatic carpet renovator, J. S. Thurman, Dec. 18, 1900, held not to infringe 521174 (C. C. A. 7th Cir.) 125 F. 761.

664,564 Quill grinding machine, S. Levy, Dec. 25, 1900, valid, not infringed (C. C, E. D. Pa.) 124 F. 69; not infringed (C. C. A. 3rd Cir.) 130 F. 711.

1901

664,890 See Reissue 11992.

665,983 Pneumatic carpet renovator, J. S. Thurman, Jan. 15, 1901, held not to infringe 521174 (C. C. A. 7th Cir.) 125 F. 761.

666,583 Horseshoe calk, J. R. Williams, Jan. 22, 1901, void or not infringed (C. C., M. D. Pa) 136 F. 210; not infringed (C. C. A. 3rd Cir.) 145 F. 928.

666,749 Game board, Fuller & Fuller, Jan. 29, 1901, not infringed (C. C., S. D. N. Y.) 119 F. 937.

667,162 Morris chair, G. A. Bowen, Jan. 29, 1901, not infringed (C. C., E. D. Pa.) 131 F. 755.

667,662 Process of duplicating phonographic records, T. A. Edison, Feb. 5, 1901, not infringed (C. C., D. Conn.) 135 F. 809.

667,813 Railroad torpedo, W. W. Weaver, Feb. 12, 1901, valid and infringed (C. C., N. D. O., E. D.) 143 F. 907.

667,916 Couch bed, E. R. Leighton, Feb. 12, 1902, valid, infringed (C. C., D. Mass.) 122 F. 87; valid on demurrer (C. C , S. D. N. Y) 124 F. 237; void (C. C., D. Mass.) 133 F. 64.

668,261 Suspenders, H. G. Macwilliam, Feb. 19, 1901, valid, infringed (C. C., S. D. N. Y.) 126 F 192.

668,268 Foot rest for chair, C. F. Streit, Feb. 19, 1901, void (C.C.A. 6th Cir.) 143 F. 981.

668,381 See Reissue 11919.

668,397 Grain drill, Swope & Moehring, Feb. 19, 1901, held to infringe 446320 (C. C. A. 8th Cir.) 118 F. 136.

668,674 Machine knit stocking, H. Brown, 22 App. D. C. 216.

668,960 Conveying and storage apparatus, Piez & Beaumont, Feb. 26, 1901, void (C. C., N. D. N. Y.) 139 F. 976.

669,011 Flat knit cap and art of making same, N. E. Kahn, Feb. 26, 1901, void or not infringed (C. C., E. D. Pa.) 131 F.464; claims 1 and 2 valid, infringed, claim 3 void (C.C.A.3rd Cir.) 135 F. 532; 136 F. 597; preliminary injunction granted (C. C. A. 3rd Cir.) 142 F. 467.

669,152 Foundation for dress collar, E. K. Warren, Mar.5, 1901, not infringed (C. C., E. D. Pa) 128 F. 745.

669,251 Saw sharpening machine, Filstrup & Schofield, Mar.5,1901, void (C. C. A. 7th Cir.) 142 F. 468.

669,561 Folding hanger for garment, I. L. Tenney, Mar. 12, 1901, valid, infringed (C. C., S. D. N. Y.) 139 F. 403.

669,574 Dynamo electric machine, D. M. Bliss, Mar. 12, 1901, valid and infringed (C. C., S. D. N. Y.) 140 F. 866.

669,708 Telephone switchboard, C. E. Scribner, Mar. 12, 1901, not infringed (C. C. A. 7th Cir.) 144 F. 684.

670,176 Sugar cane unloading machine, W. C. Gregg, Mar. 19, 1901, held not to infringe 583408 (C. C., D. Minn., 4th D.) 126 F. 377; (C. C. A 8th Cir.) 137 F. 68.

671,039 Screw driver, G. E. Wood, Apr. 2, 1901, infringed (C.C., D. Conn.) 138 F. 835.

672,056 Clutch, Davey & Ladd, Apr. 16, 1901, void (C. C., D.Mass.) 145 F. 538.

672,596 Grain drill, Denyes & Schutt, Apr. 23, 1901, held to infringe 446230 (C. C. A. 8th Cir.) 121 F. 988.

672,919 Picking and folding mechanism for envelope machine, J. A. Sherman, Apr. 30, 1901, held not to infringe 420792 (C. C. A. 1st Cir.) 122 F. 464.

673,705 Incandescent cas burner, L. Denayrouze, May 7, 1901, not infringed (C. C , E. D. N. Y.) 137 F. 423.

673,922 Beer pumping system, J. H. Nolan, May 14, 1901, claim 1 not identical with claims 1 to 4 of 710291 (C.C., D. Mass.) 139 F. 29.

674,491 Process of distilling wood, C. W. Bilfinger, May 21,1901,not infringed (C. C., W. D. N. C.) 129 F. 131.

674,555 Machine for making serpentine boiler header, C. Harter, 24 App. D. C 300.

674,940 Chimney cowl, J. M. Seidenberg, May 28, 1901, infringed (C. C , S. D. N. Y.) 112 F. 431.

675,272 Half-tone negative, T. S. Fox, May 28, 1901, valid, infringed (C. C., S. D. N. Y.) 140 F. 714.

675,661 Machine for cutting shank pieces for shoes, J. Lewis, June 4, 1901, claims 1, 2, 3, 4, 12 and 19 void, claim 15 not infringed (C. C., D. Mass.) 122 F. 470; (C. C. A. 1st Cir.) 125 F. 378.

675,693 Rolling chair, H. E. Weisgerber, June 4, 1901, not infringed (C. C , D. N. J.) 131 F. 477.

676,084 Automatic typographic numbering machine, E. G. Bates, June 11, 1901, valid, infringed (C. C., E. D N. Y.) 136 F. 776; claims 2 and 22 infringed (C. C., S. D. N. Y.) 145 F. 529.

676,426 Rheostat controller, J. Dillon, June 18,1901, held to infringe 356963 (C C. A. 7th Cir.) 136 F. 850.

676,557 Window shade holder, D. Hoyt, June 18, 1901, held to not infringe 559446 (C. C., D. N. J.) 138 F. 734; does not infringe 559446 (C. C. A. 3rd Cir.) 142 F. 750.

676,606 Fire arch for furnace, Green & Gent, June 18,1901, void (C. C. A 7th Cir.) 138 F. 830.

676,895 Curtain stretcher, R. Hoffheins, June 25, 1901, does not infringe 617813 (C. C. A 7th Cir.) 145 F. 179.

677,363 Combined time and combination lock, E. H. Mix, July 2, 1901, demurrer sustained with leave to amend (C. C , W. D Pa.) 144 F. 128.

678,219 Morris chair, G A. Bowen, July 9, 1901, not infringed (C. C., E. D. Pa.) 131 F. 755.

678,500 Process of slaking lime, A. H. Lauman, July 16, 1901, void (C. C. A. 6th Cir) 136 F. 190.

678,949 Edge ironing machine, F. E. Fay, July 23, 1901, valid, infringed (C. C., W. D. N. Y.) 120 F. 506; not infringed (C. C. A 2nd Cir.) 127 F. 325.

679,043 Tread for bicycle pedal, M. F. Wirtz, July 23, 1901, held to infringe 533867 (C. C., D. N. J.) 136 F. 222.

1901 (Concluded)

679,650 See Reissue 12058.

679,896 Sound box for talking machine, E. R. Johnson, Aug.6,1901, not infringed (C. C., D. Conn.) 125 F. 30; (C. C. A. 2nd Cir.) 131 F. 67.

680,415 Thermal door closing apparatus, O. H. Kingsland, Aug. 13, 1901, valid, infringed (C. C., S. D. N. Y.) 117 F. 621.

680,458 Thermal door closing apparatus, O. H. Kingsland, Aug. 13, 1901, valid, infringed (C. C., S. D. N. Y.) 117 F. 621.

680,707 Water tube steam boiler, F. M. Faber, Aug. 20, 1901, not infringed (C. C., W. D. Pa.) 144 F. 842.

680,769 Water heater, W. B. Folger, Aug. 20, 1901, valid, infringed (C. C. A. 7th Cir.) 120 F. 260.

682,304 Fireproof rolling metal blind, J. G. Wilson, Sept. 10, 1901, infringes 572014 (C. C. A. 2nd Cir.) 142 F. 970.

682,448 Comb for retaining the hair, W S. Bechtold, Sept 10, 1901, valid, infringed (C. C., S. D. N. Y.) 131 F. 275.

682,991 Process of duplicating phonographic records, T. H. MacDonald, Sept. 17, 1901, held not to infringe 667662 (C.C., D. Conn.) 135 F. 809.

682,992 Phonographic record, T. H. MacDonald, Sept. 17,1901, held not to infringe 667662 (C. C., D Conn.) 135 F. 809.

682,995 Bottle closure, R. L. Patterson, Sept. 17, 1901, held to infringe 468258 and 582762 (C. C., S. D. N. Y.) 136 F.199.

683,276 Whip braiding machine racer, C W. Hassler, Sept.24,1901, held not to infringe 432582 (C. C., D Mass.) 134 F. 395.

684,165 Method of regulating alternating currents, M.H.Baker, Oct. 8, 1901, void (C. C., E. D. Pa.) 135 F. 785.

684,340 Regulating device for alternating arc lamp circuits, M. H. Baker, Oct. 8,1901, claim 1 void, claim 4 valid, infringed (C. C., E. D. Pa.) 135 F. 785.

686,951 Well bailer, W. Plotts, Nov. 19, 1901, not infringed (C. C. A. 9th Cir.) 143 F. 901.

688,111 Coal conveying and storage apparatus, Piez & Beaumont, Dec. 3, 1901, void (C. C., N. D. N. Y.) 139 F 976.

688,674 Meat tree, P. Oehmen, Dec 10, 1901, void (C. C., N.D. Ill., E D.) 142 F. 763.

688,690 Bed motion for cylinder printing machine, G. F. Read, Dec. 10, 1901, valid, not infringed (C. C., S. D. N. Y.) 141 F. 112

688,739 Production of sound record, J. W. Jones, Dec. 10, 1901, plea overruled (C. C., S. D. N. Y.) 140 F. 981; void (C.C.,S. D. N. Y.) 145 F. 636, 643.

689,273 Horse collar, W. O. Barnett, 23 App. D. C. 446.

1902

690,563 Bottle washing machine, W. B. Cobb, Jan. 7, 1902, not infringed (C. C. A. 7th Cir.) 138 F. 886.

690,639 Electric railway trolley, Crockett & Johnson, Jan. 7, 1902, held not to infringe 412155 (C. C. A. 6th Cir.) 131 F. 78.

691,112 Ore roasting furnace, J. P. Cappeau, Jan. 14, 1902, held not to infringe 471264 (C. C. A. 8th Cir.) 129 F. 912.

692,655 Convertible disc plow, M. T. Hancock, Feb. 4, 1902, valid, infringed (C. C. A. 6th Cir) 128 F. 424.

693,556 Composition for cleaning and polishing, P. Levi, Feb. 18, 1902, not infringed (C. A. of D. C.) 1903 C. D. 601; 21 App. D. C. 168.

694,534 Process of boring rock, F. H. Davis, Mar. 4, 1902, void (C. C., S. D. N. Y.) 135 F. 119.

694,535 Rock boring apparatus, F. H. Davis, Mar. 4, 1902, void (C. C., S. D. N. Y.) 135 F. 119.

695,282 Machine for making prismatic glass, G. K. Cummings, Mar. 11, 1902, valid and infringed (C. C., D. N. J.) 140 F. 174; void (C. C. A. 3rd Cir.) 142 F. 454.

695,283 Method of making windows from prismatic glass, G.K.Cummings, Mar. 11, 1902, void (C. C., D. N. J.) 140 F. 174; (C. C. A. 3rd Cir.) 142 F. 454.

695,284 Method of making windows from prismatic glass, G.K.Cummings, Mar. 11, 1902, void (C. C., D. N. J.) 140 F. 174; (C. C. A. 3rd Cir.) 142 F. 454.

695,298 See Reissue 12219.

695,681 Nose piece for eyeglasses, I. Fox, Mar. 18, 1902, held to infringe 412442 (C. C., S. D. N. Y.) 124 F. 521; held not to infringe 412442 (C. C. A. 2nd Cir) 127 F. 127.

696,392 Process of making art glass, G. E. Corner, 24 App. D. C. 291.

696,670 Sparking plug for gas engine, Folger, Moriarty & Jacobson, Apr. 1, 1902, void (C. C., D. Mass.) 128 F. 45; (C.C.A. 1st Cir.) 133 F. 295.

696,940 Trousers hanger, M. H. Cazier, Apr. 8, 1902, valid, infringed (C. C. A. 7th Cir.) 138 F. 654.

698,653 Direct current meter, T. Duncan, Apr. 29, 1902, valid between parties (C. C A. 7th Cir.) 142 F. 157.

699,151 Casing for horse collar, A. G. Couch, May 6, 1902, not infringed (C. C. A. 5th Cir.) 140 F. 856.

700,018 Bake oven, W. Clauss, 25 App. D. C. 15.

700,919 Computing weighing scale, A. B. Hayden, May 27, 1902, claims 6, 7 and 8 void (C. C. A., D. C.) 119 O. G. 1586; void or not infringed, 26 App. D. C. 238.

701,580 Pneumatic surfacer for dressing stone, H. G. Kotten, June 3, 1902, valid and infringed (C. C., D. Md.) 137 F. 597.

701,776 Apparatus for baking biscuit cups for ice cream, A. Valvona, June 3, 1902, valid, infringed (C. C., E. D. Pa.) 135 F. 544.

702,560 Oil stove burner, W. R. Jeavons, June 17, 1902, void (C.C., W. D. Pa.) 126 F. 658; valid, infringed (C. C. A. 3rd Cir) 135 F. 360.

703,347 Thermostatic fire door apparatus, J. T. McCabe, June 24, 1902, held to infringe 680415 and 680458 (C. C., S. D. N. Y.) 117 F 621.

703,440 Saw set, C. Morrill, July 1, 1903, not infringed (C.C.A. 2nd Cir.) 142 F. 756.

704,167 Metal sealing cap for bottles, N.B. Abbott, July 8,1902, held to not infringe 468258 (C. C. A. 4th Cir.) 139 F. 312.

704,168 Means for cashing sales accounts, F. E. Anderson, July 8, 1902, not void on demurrer (C. C., S. D. N. Y.) 139 F. 451.

705,715 Process of lustering silk, C. Stuart, July 29, 1902, void (C. C., D. N. J.) 139 F. 935.

705,716 Machine for lustering silk, C. Stuart, July 29, 1902, void (C. C., D. N. J.) 139 F. 935.

706,710 Receptacle for tooth powder, J. C. Allen, Aug. 12,1902, bill dismissed for want of jurisdiction (C. C., D. N. J.) 145 F. 948.

709,001 Applying asbestos insulation to electrical conductors, L. W. Downes, Sept. 16, 1902, not infringed by 740131 (C. C., M. D. Pa.) 144 F. 106.

709,073 Convertible railway car, Brill & Bucknam, Sept. 16, 1902, held to infringe Reissue 11992 (C. C., N. D. N. Y.) 139 F. 330; infringes certain claims of Reissue 11992 (C. C. A. 2nd Cir.) 144 F. 399.

708,679 Wire fence making machine, T. Sutherland, Sept. 9, 1902, held to infringe 628253 (C. C., D. Minn., 4th D.) 126 F. 381.

710,132 Coffee maker, T. K. Baker, Sept. 30, 1902, held to infringe 650129 (C. C. A. 8th Cir.) 138 F. 63.

710,133 Coffee maker, T. K. Baker, Sept. 30, 1902, held to infringe 650129 (C. C. A. 8th Cir.) 138 F. 63.

710,291 Dispensing apparatus for beer, etc., S. W. Moran, Sept. 30, 1902, claims 1 to 4 not identical with claim 1 of 673922 (C. C., D. Mass.) 139 F. 29.

710,434 Process of making prismatic glass, G. K. Cummings, Oct. 7, 1902, void (C. C.. D. N. J.) 140 F. 174; (C. C. A. 3rd Cir.) 142 F. 454.

711,303 Wire barbing machine, J. E. Fredrich, Oct. 14, 1902, infringes 365723 (C. C. A. 7th Cir.) 143 F. 116.

712,998 Can body forming machine, J. Eldridge, Nov. 4, 1902, held not to infringe 436792 or 598567 (C. C., N. D. Cal.) 137 F. 86; infringes 436792, does not infringe 598567 (C. C. A. 9th Cir.) 142 F. 141.

1902 (Concluded)

713,209 Process of duplicating phonographic records, T. A. Edison, Nov. 11, 1902, not infringed (C. C., N. D. Ill.) 125 F. 388; (C. C., D. Conn.) 135 F. 809; void (C. C. A. 7th Cir.) 142 F. 164.

714,020 Electric interrupter, L. G. Nilson, Nov. 18, 1902, priority denied in interference. 27 App. D. C. 451.

714,880 Composition for removing paint and process of making same, C. Ellis, Dec. 2, 1902, valid and infringed (C. C., S. D. N. Y.) 146 F. 988.

715,512 Cigar band, M. Regensburg, Dec. 9, 1902, void (C. C., E.D. Pa.) 136 F. 866; (C. C. A. 3rd Cir) 142 F. 160.

717,014 Method of making brushes, W. Morrison, Dec. 30, 1902, claim 1 valid and infringed (C. C., N. D. N. Y.) 146 F. 517.

717,348 Vamp stay for shoes, J. H. Charmbury, Dec. 30,1902, valid, infringed (C. C., D. N. J.) 141 F. 373.

1903

718,130 Feed mechanism for carding machine, H. Kemp, Jan. 13, 1903, valid, infringed (C. C., D. Mass.) 129 F. 382.

718,378 Insulating lining and process of making same for incandescent lamp socket, G. B. Painter, Jan. 13, 1903, claims for product void (C. C. A. 2nd Cir.) 139 F. 568.

718,499 Tenting cloth, A. Mitchelsen, Jan 13, 1903, void (C. C., D. Mass.) 137 F. 922; (C. C. A. 1st Cir.) 144 F. 979.

719,814 Neckwear supporter and fastener, O. Krans, Feb. 3, 1903, void (C. C., S. D. N. Y.) 145 F. 956.

720,616 Glove fastener, E. Pringle, Feb. 17, 1903, infringed (C. C., N. D. N. Y.) 140 F. 556.

720,676 Brake beam fulcrum, S. A. Crone, Feb. 17, 1903, priority awarded in interference, 26 App. D. C. 352.

721,117 Apparatus for casting and finishing stereotype plates, H. A. W. Wood, Feb. 17, 1903, infringed on motion for injunction (C. C., E. D. N. Y.) 124 F. 322.

721,118 Apparatus for casting and finishing stereotype plates, H. A. W. Wood, Feb. 17, 1903, infringed on motion for injunction (C. C., E. D. N. Y.) 124 F. 322.

721,120 Apparatus for casting and finishing stereotype plates, H. A. W. Wood, Feb. 17, 1903, infringed on motion for injunction (C. C., E. D. N. Y.) 124 F. 322.

721,121 Apparatus for casting and finishing stereotype plates, H. A. W. Wood, Feb. 17, 1903, infringed on motion for injunction (C. C., E. D. N. Y.) 124 F. 322.

721,276 Typographic numbering machine, E. G. Bates, Feb.24,1903, not infringed (C. C., S. D. N. Y.) 145 F. 526.

721,774 Cluster of electric lamps, R. B. Benjamin, Mar. 3, 1903, not infringed (C. C., S. D. N. Y) 141 F. 989.

721,777 Cluster of electric lamps. R. B. Benjamin, Mar. 3, 1903, not infringed (C. C., S. D. N. Y.) 141 F. 989.

722,367 Telephone system, Latting & Goodrum, 25 App. D. C. 591; see Reissue 12156.

722,504 High grade steel, C. H. Halcomb. Mar. 10, 1903, priority awarded in interference, 26 App. D. C. 307.

723,589 Press for making screw insulators of glass, T. C. Duffield, Mar. 24, 1903, held not to infringe 542565 on motion for preliminary injunction (C C., D. N. J.) 132 F.312; does not infringe 542565 (C. C , D. N J) 144 F. 418.

725,278 Bolt anchor, S. S Newton, Apr 14, 1903, valid and infringed on motion for preliminary injunction (C. C., S. D. N. Y.) 141 F. 378

725,858 Savings bank, Mills & Cunningham, Apr. 21, 1903, void (C. C. A. 7th Cir.) 143 F. 325.

726,293 Process of exhausting lamp bulbs, J. W. Howell, Apr. 28, 1903, held not invalid on demurrer (C. C., D N. J.) 137 F. 600; valid (C. C., D. N. J.) 140 F. 876.

726,812 Process of treating coffee, W. E. Baker, Apr. 28, 1903, void (C C. A. 8th Cir.) 146 F 744.

727,331 See Reissue 12115,

727,888 Weight stop motion for twine winding spindles, B. B. Bowers, May 12, 1903, not infringed (C. C. A. 5th Cir.) 142 F. 137.

729,084 Swift bracket, W. G. Morrison, May 26, 1903, valid, infringed (C. C., D. N. J.) 136 F. 859; void (C C. A. 3rd Cir.) 142 F. 149.

729,247 Rimless spectacles, J. C. Wells, May 26, 1903, awarded priority in interference, 27 App D. C. 115.

729,500 Eye shade, W. F. Mahoney, May 26, 1903, ~~void~~ valid (C.C.A.7th Cir.) 143 F 124.

731,668 Brake beam fulcrum, S. A. Crone, June 23, 1903, priority awarded in interference, 26 App. D. C. 352.

731,865 Brake beam fulcrum, S. A. Crone, June 23, 1903, priority awarded in interference, 26 App. D. C. 352.

733,059 Coin controlled weighing machine, F. N. Magee. July 7, 1903, held to infringe 387285 (C. C., D. N. J.) 136 F. 891

733,286 Apparatus for forming concrete piles, F. Shuman, July 7, 1903, priority denied in interference, 27 App D. C. 324.

733,288 Apparatus for forming concrete piles, F. Shuman. July 7, 1903, priority denied in interference, 27 App D. C. 324.

735,655 Separable button, A. J. Bradley, Aug. 4, 1903, infringes 580000 (C. C., S. D. N. Y.) 143 F. 523.

736 032 Bath seat, W. H. Silver, Aug. 11, 1903, valid and infringed (C. C., D. Mass.) 142 F. 525.

736,037 Bottle soaking machine, S. Volz, Aug. 11, 1903, held to not infringe 690563 (C. C. A. 7th Cir.) 138 F. 886.

736,285 Mechanical movement for washing machine, J. W. Martin, Aug. 11, 1903, held to infringe 608220 (C. C. A.8th Cir.) 138 F. 396.

736,313 Method of pulling candy, C. Thibodeau, Aug. 11, 1903, suit on assignment (C. C., W. D. Pa.) 143 F. 139.

736,346 Process of treating coffee, W. E. Baker, Aug. 18, 1903, void (C. C. A 8th Cir.) 146 F 744

736,461 Electric motor and brake, A. A. Thresher, Aug. 18, 1903, plea of invalidity denied (C. C., N. D. N. Y.) 143 F. 337.

736,809 Weight stop motion for twine winding spindles, F. W. Worrill, Aug. 18, 1903, does not infringe 727888 (C.C.A. 5th Cir) 142 F. 137.

740,131 Method of applying asbestos insulation to electrical conductors, J. A. Heany, Sept. 29, 1903, not anticipated.by 534-785 and 709001 (C. C., M. D. Pa.) 144 F. 106.

741,125 Method of making wire glass, N. Franzen, Oct. 13, 1903, involved in action on contract (C. C. A. 3rd Cir.) 143 F. 501

741,301 Seamless pipe forging machine, O. Briede, Oct. 13, 1903, Reissue granted, 27 App. D. C. 298.

744,197 Thermal electric circuit protector, O. C. Hoffman. Nov. 17, 1903, denied priority in interference, 26 App. D. C. 336.

745,345 Spring bed or seat bottom, Haas & Crow, Dec. 1, 1903, does not infringe 639222 (C. C. A. 5th Cir.) 140 F. 606.

1904

752,903 Dredge for salt or pepper, O. K. Hogan, Feb. 23, 1904, void (C. C., E. D. Pa.) 145 F 199.

756,177 Seamless woven cartridge belt, A. Mills, Mar. 29, 1904, not infringed (C. C., D. Conn.) 136 F.874; not infringed (C. C. A. 2nd Cir.) 144 F. 700.

756,178 Cartridge belt, A. Mills, Mar 29, 1904, not infringed (C.C., D Conn.) 136 F. 874; (C. C. A. 2nd Cir.) 144 F. 700.

757,754 Railway rail stay, Laas & Sponenburg, Apr. 19, 1904, preliminary injunction granted (C. C., E. D. Wis.) 145 F. 195; priority awarded in interference, 26 App. D. C. 354.

758,268 Car coupling, A. A. Moss, Apr. 26, 1904, demurrer sustained with leave to amend (C. C., W. D. Pa) 144 F. 128.

773,234 Vibratile apparatus, L. Snyder, Oct. 25, 1904, valid, infringed (C. C., S. D. N. Y.) 138 F. 82.

781,613 Mantle supporting device, R. Momand, Jan. 31, 1905, does not infringe 613648 (C. C., S. D. N. Y.) 145 F. 516.

782,375 Composition for making phonograph records, J. W. Aylsworth, Feb. 14, 1905, preliminary injunction granted (C. C., E. D Pa.) 144 F. 437.

791,355 Street lamp, R. Momand, May 30, 1905, does not infringe 652730 (C. C., S. D. N. Y.) 145 F 516.

791,510 Brush, A. L. Sonn, June 6, 1905, infringes 717014 (C.C., N. D. N. Y.) 146 F. 517.

792,688 Heel cushion for shoes, E. J. Bliss, June 20, 1905, valid and infringed (C. C., D. Mass.); Tredair Rubber Co. v. Foster Rubber Co., consent decree Dec. 19, 1905.

STATEMENT

SHOWING

THE NUMBERS OF REISSUE PATENTS ISSUED IN EACH CALENDAR YEAR.

YEAR	REISSUE NUMBERS	YEAR	REISSUE NUMBERS
1838	1 — 6	1873	5216 — 5716
1839	7 — 19	1874	5717 — 6199
1840	20 — 29	1875	6200 — 6830
1841	30 — 35	1876	6831 — 7451
1842	36 — 48	1877	7452 — 8019
1843	49 — 59	1878	8020 — 8528
1844	60 — 66	1879	8529 — 9016
1845	67 — 77	1880	9017 — 9522
1846	78 — 90	1881	9523 — 9993
1847	91 — 104	1882	9994 — 10264
1848	105 — 127	1883	10265 — 10431
1849	128 — 157	1884	10432 — 10547
1850	158 — 183	1885	10548 — 10676
1851	184 — 208	1886	10677 — 10792
1852	209 — 228	1887	10793 — 10891
1853	229 — 257	1888	10892 — 10977
1854	258 — 285	1889	10978 — 11052
1855	286 — 336	1890	11053 — 11136
1856	337 — 419	1891	11137 — 11216
1857	420 — 516	1892	11217 — 11297
1858	517 — 642	1893	11298 — 11396
1859	643 — 873	1894	11397 — 11460
1860	874 — 1105	1895	11461 — 11519
1861	1106 — 1252	1896	11520 — 11580
1862	1253 — 1368	1897	11581 — 11645
1863	1369 — 1595	1898	11646 — 11705
1864	1596 — 1843	1899	11706 — 11797
1865	1844 — 2139	1900	11798 — 11878
1866	2140 — 2429	1901	11879 — 11959
1867	2430 — 2829	1902	11960 — 12069
1868	2830 — 3249	1903	12070 — 12188
1869	3250 — 3783	1904	12189 — 12298
1870	3784 — 4222	1905	12299 — 12427
1871	4223 — 4686	1906	12428 —
1872	4687 — 5215		

TABLE II.—REISSUES.

Chronological List of Adjudicated Reissue Patents.

[This list supplements that of Table I. Even though a patent was reissued, such adjudications thereof as occurred prior to the reissue, will be found under Table I.]

May 7, 1829 (original June 19, 1822). Percussion gun, J. Shaw, 7 Pet. 292.

July 10, 1834 (original March 18, 1829). Railroad car, I. Knight, See Reissue Apr. 28, 1836.

Apr. 28, 1836 (original March 18, 1829). Railroad car, I. Knight, F. Cas. 7882; 3 Fish. 2.

July 29, 1836 (original Dec. 15, 1826). Wool manufacture, J. Goulding, F. Cas. 7519; 7 Wall. 583.

Nov. 28, 1836 (original Dec. 17, 1832). Stove, H. Stanley, F. Cas. 13285; F. Cas. 13286.

3 (original 441). Coloring matter, H. Stevens, F. Cas. 13368.

17 (original 777). Ribs of cotton gin, E. Carver, F. Cas. 2485; 16 Pet. 517.

31 (original Mar. 3, 1833). Preparing palm leaf, J. C. Smith, F. Cas. 6766.

48 (original Jan. 20, 1836). Air-tight stove, J. Orr, F. Cas. 10587; F. Cas. 10590; F. Cas. 10591.

60 (original 461). Gun lock, E. Allen, F. Cas. 215; F. Cas. 216; F. Cas. 217; F. Cas. 238.

67 (original 2558). Generating and applying heat, F. Du Faur, F. Cas. 3831.

71 (original Dec. 27, 1828). Planing mill, W. Woodworth, F. Cas. 1125; F. Cas. 1389; F. Cas. 1558; F. Cas. 1559; F. Cas. 1945; F. Cas. 1946; F. Cas. 1957; F. Cas. 1962; F. Cas. 1963; F. Cas. 4957; F. Cas. 5389; F. Cas. 5393; F. Cas. 5395; F. Cas. 5396; F. Cas. 7270; F. Cas. 8381; F. Cas. 11866; F. Cas 12947; F. Cas. 13078; F. Cas. 16852; F. Cas. 17832; F.Cas.17839; F.Cas.17840; F.Cas 17845; F. Cas. 18011; F. Cas. 18013; F. Cas. 18014; F. Cas. 18-017; F. Cas. 18019; F. Cas. 18021; F. Cas. 18022; 4 How. 709 7 How. 560; 8 How. 258; 9 How. 109; 14 How. 539; 15 How. 546; 20 How. 55; 20 How. 198; 1 Wall. 340.

82 (original 2021). Lead pipe machine, J. & H. Hanson, F. Cas. 11266; F. Cas. 13760; F. Cas. 13763; F. Cas. 13764; F. Cas. 13765; 14 How. 177; 22 How. 132.

92 (original 3885). Cotton press, P. B. Tyler, F. Cas. 14309.

96 (original 4204). Grinding tools, W. Hovey, F. Cas. 6746.

117 (original 1647). Electric telegraph, S. F. B. Morse, F.Cas. 2909; F. Cas. 5103; F. Cas. 9861; F. Cas 13034; F.Cas.13036; F. Cas. 13104; 15 How. 137; 21 How. 456; 21 How. 460.

118 (original 4453). Electric telegraph, S. F. B. Morse, F.Cas. 9861; F. Cas. 13027; F. Cas. 13036; F. Cas. 13043; F. Cas. 13104; 15 How. 109; 15 How. 137.

124 (original Feb. 25, 1836). Revolving fire arms, S. Colt, F. Cas. 3030; F. Cas. 3032.

140 (original 1839). Ginning machine, M. D. Whipple, F. Cas.4431; F. Cas. 17514; F. Cas. 17520.

142 (original 3292). Coal breaker, J.Battin,F.Cas.1106; F.Cas.1107.

187 (original 5575). Making mouldings, A. T. Serrell, F. Cas. 12-671. See Reissue 243.

217 (original 7446). Dyeing parti-colored yarn, A. Smith. F. Cas. 13059; F. Cas. 13060.

231 (original 6762). Operating car brake, N. Hodge, F. Cas. 6559; F. Cas. 6560; F. Cas. 6561; F. Cas. 17957.

239 (original 5335) Harvester, C. H McCormick, F. Cas. 8724; F. Cas. 8727; 16 How. 480; 20 How. 402.

243 (original 5575, 1st Reissue 187). Machine for making wood mouldings, A. T. Serrell, F. Cas. 12671.

247 (original 491). Power loom, W. Crompton, F. Cas. 4931.

278 (original 8294). Sewing machine, I. M. Singer, F. Cas. 12900; F. Cas. 17610.

302 (original 6148). Middlings purifier, Frost & Monroe, F. Cas. 2439.

303 (original 4266). Vault cover, T. Hyatt, F. Cas. 3237; F. Cas. 7993.

305 (original 8192). Harvester, Palmer & Williams, F. Cas. 12688.

306 (original 6545). Winnowing machine, B. D. Sanders, F. Cas. 12295.

313 (original 8322). Nut and washer machine, Carter & Rees, 4 Fish. 550; 1 Mac A. Pat. Cases 388; F. Cas. 2475; F. Cas. 17941.

325 (original 8154). Lantern, H. & J. Sangster, F. Cas. 12320.

331 (original 6245). Harvester, J. Haines, F. Cas. 12114.

346 (original 7776). Sewing machine, A. B. Wilson, F. Cas. 5846; F. Cas 11324; F. Cas. 11326; F. Cas. 11334; F. Cas. 11337; F. Cas. 11342.

355 (original 10597). Sewing machine, W. H. Johnson, F. Cas. 7409; F. Cas. 7411.

396 (original 4472). Hat body, machine for making, H. A. Wells, F. Cas. 2188.

401 (original 2886). Door lock, J. P. Sherwood, F. Cas. 8413; F. Cas, 8414; F. Cas. 9791.

404 (original 13606). Boring machine, Wickoff & Morrison, F. Cas. 4687; F. Cas. 4688.

409 (original 2725). Peg-cutting machine, S.K.Baldwin, F. Cas.805.

414 (original 7776). Sewing machine, A. B. Wilson, F. Cas. 2142; F. Cas. 4884; F. Cas. 4885; F. Cas. 5846; F. Cas. 11323; F. Cas. 11327; F. Cas. 11329; F. Cas. 11330; F. Cas.11-331; F. Cas. 11333; F. Cas. 11334; F. Cas 11338; F. Cas. 11342; F. Cas. 17787; 15 F. 395; 15 F. 397; 2 Otto 716.

446 (original 12678). Furnace for wet fuel, M. Thompson, F. Cas. 1463; F. Cas. 1465; F. Cas. 1466; F. Cas. 11686; 111 U. S. 122.

449 (original 5227). Reaper, O. Hussey, F. Cas. 432; F. Cas. 6950.

455 (original 13802). Refrigerator, D. W. C. Sanford, F. Cas.11897; F. Cas. 11903; F. Cas. 11913; 91 U. S. 150.

468 (original 5112). Cast iron car wheels, A. Atwood, 10 F. 283.

484 (original 4912). Bellows for musical instrument, J. Cahart, F. Cas. 2288.

501 (original 17602). Hoop skirt, E. F. Woodward, F. Cas. 17425.

518 (original 6099). Sewing machine, Morey & Johnson, F. Cas. 12900.

521 (original 14133). Eccentric explosive shells, W. W. Hubbell, 5 Ct. of Claims 1.

540 (original 9432). Grain separator, J R. Moffitt, F. Cas. 9690.

545 (original 13523). Harvester, J. Haines, 4 Wall. 523.

554 (original 18083). Seeding machine, C. W. Cahoon, F. Cas. 2292.

556 & **557** (original 8075). India rubber, N. Goodyear, F. Cas. 5555; F. Cas. 5556; F. Cas. 5571; F. Cas. 5571a; F. Cas. 5572; F. Cas. 5573; F. Cas. 5577; F. Cas. 5578; F. Cas. 5579; F. Cas. 5580; F. Cas. 5584; F. Cas. 5587.

568 (original 7931). Sewing machine, Grover & Baker, F. Cas. 5847.

623 (original 12231). Seed planter, J. Case, F. Cas. 2488; 2 Wall. 320.

648 (original 20159). Lamp, E. F. Jones, F. Cas. 7500.

666 (original 8427). Nuts, W. Kenyon. F. Cas. 2475; F. Cas 17941.

723 & **724** (original 10038). Harvester, Sylla & Adams. F. Cas. 656.

742 (original 5227). Reaper, O. Hussey, F. Cas. 432; F Cas. 6948.

747 (original 5006). Wire grating manufacture, H. Jenkins, F. Cas. 2630.

759 & **763** (original 6162). Cut off for steam engine, G. H. Corliss, F Cas. 3233.

780 (original 8253). Cut off gear, G. H. Corliss, F. Cas. 3233.

786—1,086

786 (original 22356). Balancing mill stones, J. Fairclough, 9 Wall. 737.

797 (original 10741). Vulcanizing caoutchouc, L. O. P. Meyer, F. Cas. 11279; F. Cas. 11280; F. Cas. 11281; F. Cas. 11282; F. Cas. 11283.

853 (original 6951). Wood bending machine, T. Blanchard, F. Cas. 1514; 8 Wall. 420.

870 (original 25701). Hoop skirt, J. Draper, F. Cas. 4028; F. Cas. 4029.

875, 877, 878 & 879 (original 12044). Harvester, C. Wheeler, Jr., F. Cas. 17493; F. Cas. 17499.

906 (original 21026). Horse car coupling, B. E. Sampson, 4 F. 415; 16 F. 791.

910 (original 4199). Steam engine, F. E Sickles, F. Cas. 12839; F. Cas. 14100.

920 (original 17184). Paper bag machine, B. F. Rice, F. Cas. 10150; F. Cas. 14386; F. Cas. 14391; 105 U. S. 766.

933 (original 15570). Bonnett pressing machine, W. Osborn, F. Cas. 4018.

947 (original 6939). Loom, M. Marshall, F. Cas. 3406.

963 (original 13586). Rotary knitting machine, Tompkins & Johnson, F. Cas. 14088.

978 (original 15474). Water closet, W. S. Carr, 7 F. 821, 114 U. S. 1.

985 & 986 (original 10967) Harvester, T. S Steadman, F. Cas. 17-568; 7 Wall. 685.

1,003 (original 8212). Harvester, W. H. Seymour, F. Cas. 12688.

1,036 (original 9893). Seed planter. G. W. Brown, F. Cas. 2030; 23 Wall. 181.

1,037 (original 9893). Seed planter, G. W. Brown, F. Cas. 2030; 23 Wall. 181.

1,038 & 1,039 (original 9893). Seed planter, G. W. Brown, F. Cas. 2030; 23 Wall 181.

1,049 (original 12700). Plate holder for camera, A. S. Southworth, F. Cas. 10579; F. Cas. 17869; F. Cas 17870; F. Cas. 17-871; 106 U. S. 142.

1,062 (original 23694). Egg beater, E P. Monroe, F. Cas. 9714.

1,085 (original 3633). Ind, rubber, soft rubber, C. Goodyear, F. Cas. 3685; F. Cas. 5557; F. Cas. 5558; F. Cas. 5559; F. Cas. 5561; F. Cas. 5562; F. Cas. 5563; F. Cas. 5564; F. Cas. 5565; F. Cas. 5568; F. Cas. 5569; F. Cas. 5570; F. Cas. 5571a; F. Cas 5573; F. Cas. 5574; F. Cas. 5579; F. Cas. 5580; F Cas. 5581; F. Cas. 5583; F. Cas. 11932; F. Cas. 13654; 9 Wall. 788; 9 Wall. 807.

1,086 & 1.087 (original 4472). Hat body, machine for making, H. A. Wells, F Cas. 2190; 1 Wall. 531.

1,091, 1,092, 1.093, 1,094 & 1,095 (original 12811). Seed planter, G. W. Brown, F. Cas. 2030; 23 Wall. 181.

1.110 (original 8192). Harvester, Palmer & Williams, 11 Wall. 516.

1 112 (original 3802). Valves for steam engines, F. E. Sickles, F. Cas. 12839.

1,113 (original 4199). Steam engine, F. E. Sickles, F. Cas. 12833; F. Cas. 12837; F. Cas. 12839; 10 How. 419.

1,126 (original 12017). Seats for public halls, A. H. Allen, F. Cas. 218; F. Cas. 232; 11 F. 427; 12 F. 786; 106 U. S. 672.

1,137 (original 4023). Wool carding machine, S. R. Parkhurst, F. Cas. 9833.

1,145 (original 13499). Sewing machine, Ross & Marshall, F. Cas. 12081.

1,154 (original 4750). Sewing machine, E. Howe, Jr., F. Cas. 6778.

1,177 (original 8212). Harvester, W. H. Seymour, F. Cas. 12687; F. Cas. 12688; 11 Wall. 516; 97 U. S. 349.

1,211 (original 26114). Harvester, W. A. Kirby, F. Cas. 7837.

1,262 (original 8720). Harvester, B. Densmore, F. Cas. 7838; 11 Wall. 678.

1,268 (original 28951). Revolver, E. Allen, F. Cas. 12999.

1,272 (original 13927). Cannon manufacture, D. Treadwell, F. Cas. 14158.

1,280 (original 6148). Middlings purifier, Frost & Monroe, F. Cas. 2440; F. Cas. 13700.

1,299 (original 20249). Clover huller, J. C. Birdsell, F. Cas. 1433; F. Cas. 1434; F. Cas. 1435; F. Cas. 1436; F. Cas. 1437; F. Cas. 10994; 112 U. S 485.

1,312 (original 14405). Wood bending machine, J. C. Morris, F.Cas. 9835.

1,322 (original 15693). Horse power, A. W. Gray, F. Cas. 5717.

1,388 (original 8282). Sewing machine, Akins & Felthousen, F. Cas. 11325.

1,390 (original 32521). Door lock, W. S. Kirkham, F. Cas. 2950; 18 Wall. 120.

1,393, 1.394 & 1,395 (original 5522). Seed drill, L. Moore, 7 Wall. 515.

1.397 (original 32257). Stove, Treadwell & Hailes, F. Cas. 5904; 20 Wall. 353.

1,400 (original 4120). Machine for cutting irregular forms, Hale & Goodman, F. Cas. 5915.

1,448 (original 11343). Paper pulp manufacture, Watt & Burgess, F. Cas. 320; F. Cas. 322; 23 Wall. 566.

1,449 (original 11343). Paper pulp manufacture, Watt & Burgess; F. Cas. 320; F. Cas. 321a; F. Cas. 322; 4 Wall. 333; 23 Wall. 566.

1,456 (original 33270). Setting teeth in saws, N. W. Spaulding, F. Cas 13219; F. Cas. 13220; F. Cas. 13221; 13 Wall. 453.

1,470—1,922

1,470 (original 32331). Lock, L. Yale, Jr., F. Cas. 18123.
1,483 (original 26013). Buckle, L. C. Chase, F. Cas. 2627.
1,514 (original 32180). Halter ring, L. C. Chase, F. Cas. 2631.
1,515 (original 19412). Cultivator, P. Dennis, F. Cas. 3794; 95 U.S. 560.
1,518 (original 34026). Skirt machine, B. A. Mann, F. Cas. 17641.
1,527 (original 35390). Scroll saw guide, J. Richards, 109 U. S. 408.
1,562 (original 11971). Sewing machine, C. Parham, F. Cas. 10713.
1,583 (original 11491). Wooden pavement, S. Nicolson, F. Cas. 10-251.
1,606 (original 23263). Bottle stopper, H. W. Putnam, F Cas. 11-480; F Cas. 11483; F. Cas. 11485; F. Cas. 11486; 9 F. 448.
1,646 (original 38961). Shirt collar, S. S. Gray, F. Cas. 14395; 23 Wall. 530.
1,649 (original 41214). Surface sizing fibrous matter, W. Fuzzard, F. Cas. 5165.
1,651 (original 35842). Apparatus for saving silver from waste solution, J. Shaw, F. Cas. 12727.
1,682 (original 8192). Harvester, Palmer & Williams, F. Cas. 12687; 97 U. S. 349
1,683 (original 8212). Harvester, W. H. Seymour, F. Cas. 12687; 11 Wall. 516; 97 U. S. 349.
1,804 (original 43378). Metal cans, J. Bouvet, F. Cas. 3742; F. Cas. 3743; 8 F. 434.
1,821 (original 38987). Machine for making knitting needles, T. Sands, F. Cas 12306.
1,823 (original 10448). Coal burner, D. G. Littlefield, F. Cas. 11008.
1,825 (original 44249). Machine for cutting paper for twine, J. B. Wortendyke, F. Cas. 18050.
1,826 (original 25484). Grain separator, J. L. Booth, F. Cas. 1648; F. Cas 1648a; 102 U. S. 96.
1,828 (original 11376). Shirt collar, W. Hunt, F. Cas. 14395; F. Cas. 14396.
1,869 & **1,871** (original 27899). Hay elevator, F. F. Fowler, 8 Wall. 445
1,874 (original 21286) Tempering wire and steel, H Waterman, F. Cas. 17261.
1,904 (original 43009). Artificial gums, J. A. Cummings, F. Cas. 5589; F. Cas 5590; F. Cas. 5591; F. Cas. 5594; F. Cas. 5596; F. Cas. 5597; F. Cas. 5598; F. Cas 5600; F. Cas. 5603; 3 Cliff. 555; 6 Fish. 329; MacArthur & MacKay 74; 93 U. S. 486; 102 U S. 222
1,914 & **1,915** (original 7813). Horse rake, H. W. Sabin, F. Cas. 6575.
1,922 (original 41782). Extracting tan bark, S. W. Pingree, F. Cas. 1857.

1,934 (original 22539). Clothes wringer, J. Allender, F. Cas. 750; F. Cas. 752; 11 Wall. 488.

1,935 (original 40789). Corn planter, G. I. Bergen, 22 F. 781; 22 F. 787.

1,940 (original 16956). Syringe, C. H. & H. E. Davidson, 8 Wall. 230.

1,948 (original 27094). Cartridge case machine, E. Allen, F. Cas. 14-369; 7 F. 344; 8 F. 446; 112 U. S. 624.

1,980 (original 23771). Cuffs and collars, W. E. Lockwood, F. Cas. 14395.

1,988 (original 41897). Stove, W. E. Hagan, F. Cas. 5508.

2,005 (original 31626). Syringe, F. B. Richardson, F. Cas. 11787.

2,034 (original 45998). Paper collar, J. H. Hoffman, F. Cas. 6576; F. Cas. 6578.

2,046 (original 25701). Hoop skirt, J. Draper; F. Cas. 4030.

2,087 & 2,088 (original 40584). Stone channeling machine, J. G. Wardwell, F. Cas. 13331; F. Cas. 13334; F. Cas. 13335; F. Cas 13336.

2,092 (original 44960). Spring mattress, S. P. Kittle, F. Cas. 7856.

2,124 (original 43772). Machine for compressing metal articles in dies, Hopson & Brooks, 32 F. 221.

2,125 (original 6439). Sewing machine, J. Bachelder, F. Cas. 706; F. Cas. 11321; 7 F. 215.

2,133 (original 35122), Locomotive lamp, I. A. Williams, F. Cas. 17-716; F. Cas. 17735; 2 F. 702.

2,139 See Reissue 2542.

2,145 (original 20542). Stone crusher, E. W. Blake, F. Cas. 1493a; F. Cas. 1494; F. Cas. 1499; F. Cas. 1500; F. Cas 1504; F. Cas. 10039; 16 F. 676; 94 U. S 728.

2,160 (original 44561). Feed water feeder, E. R. Stilwell, F. Cas. 13-453.

2,165 (original 42591). Corset, S. A. Moody, F. Cas. 9747.

2,166 (original 21879). Self-mousing hook, J. R. Henshaw, F. Cas. 9536.

2,183 (original 19747). Wire staple, B. Boardman, F. Cas 12020.

2,213 (original 36603). Wool lubricating machine, W. Clissold, F. Cas. 6187.

2,224 (original 35315). Harvester, R. Hoffheins, 107 U. S. 132.

2,257 (original 15570). Bonnet pressing machine, W. Osborn, F. Cas. 4019; F. Cas. 4020; F. Cas. 4021.

2,260 (original 46027). Hay elevator, S. Rogers, F. Cas. 10099; 13 F. 451.

2,261 (original 53794). Petroleum car, J. & A. Densmore, F. Cas. 3809; 102 U. S. 375.

2,309 (original 38664). Paper collar, A. Evans, F. Cas. 14395; 23 Wall. 530.

2,311 (original 16700). Solar camera, D. A. Woodward, F. Cas. 18003.

2,354 (original 37630). Reaping machine, J. S. Marsh, F. Cas. 9115.
2,355 (original 40964). Bronzing or coloring iron, H. Tucker, F. Cas. 14227; 5 F. 808; 5 F. 810; 120 U. S. 442.
2,356 (original 40964). Bronzing or coloring iron, H. Tucker, F. Cas. 14216; 7 F. 213; 9 F. 299; 120 U. S. 442.
2,380 (original 22859). Cultivator, J. Dundas, F. Cas. 12420.
2,386 (original 36266). Bottle stopper, A. Albertson, 4 F. 635; 6 F. 874.
2,406 (original 19824). Syrup caster, E. Bigelow, F. Cas. 1401.
2,429 (original 44129). Hay elevator, E. L. Walker, F. Cas. 10099; 13 F. 451.
2,487 (original 37433). Drilling and screw cutting machine, C. W. Coe, 98 U. S. 31.
2,490 (original 40481). Harvester, R. Hoffheins, 107 U. S. 132.
2,511 (original 19074). Billiard table cushion, H. W. Collender, F. Cas 2998; F. Cas. 2999.
2,529 (original 39702). Envelope machine, G. H. Reay, 15 F. 749; 19 F. 308; 19 F. 311; 20 F. 506.
2,542 (original 41403; 1st Reissue 2139). Metal punch, N. C. Stiles, 29 F. 445.
2,569, 2,570 & 2,571 (original 15957). Caustic alkali, G. Thompson, F. Cas. 10954; F. Cas. 10955; F. Cas. 10956; F. Cas. 13942; F. Cas. 13968.
2,587 (original 46568). Fabric for hats, Loewenberg, F. Cas. 804.
2,597 See Reissue 2979.
2,598 (original 59733). Broom, T. Wright, 19 F. 263.
2,608 (original 10038). Harvester, Sylla & Adams, F. Cas. 656.
2,610 (original 12044). Harvester, C. Wheeler, Jr., F. Cas. 17493; F. Cas. 17498; F. Cas. 17499.
2,624 (original 39919). Corset skirt supporter, L. H. Foy, F. Cas. 5017; F. Cas. 5018; F. Cas. 5019.
2,626 (original 30441). Picker staff motion for loom, E. H. Graham, F. Cas 5671; F. Cas 5672; 23 Wall. 261.
2,632 (original 12367). Harvester, C. Wheeler, Jr., F. Cas. 17493; F. Cas 17499.
2,667 (original 40777). Gate, A C. Teel, F. Cas. 18083.
2,682 (original 34252). Spoons and forks, F. Grosjean, F. Cas. 5841.
2,684 (original 46495) Roofing composition, W. L. Potter, F. Cas. 11209.
2,707 (original 33384). Bridge, King & Freese, F. Cas. 7797.
2,711 (original 22697). Soda water apparatus, E. Bigelow, F. Cas. 1401.
2,748 (original 11491). Wooden pavement, S. Nicolson, F Cas. 309; F. Cas. 311; F. Cas. 312; F. Cas. 1400; F. Cas. 7273; 14 Wall. 452; 97 U. S. 126.
2,756 (original 44624). Spring fixture for shades, S. Hartshorn, F. Cas. 6166; F. Cas. 6167; F. Cas. 6168; 18 F. 90.

2,765 (original 22723). Lamp, C. Gersten, F. Cas. 3557.
2,769 (original 41097). Putting up powders, etc., H. Sawyer, F.Cas. 12398.
2,805 (original 43192). Compound for inking rollers, Francis & Lemate, F. Cas. 5039.
2,829 (original 21029). Clothes wringer, I. A. Sargeant, F. Cas.9507; 20 Wall. 242.
2,843 & 2,844 (original 9653). Corded elastic fabric, W. Smith, F. Cas. 13050; 100 U. S. 110.
2,845 (original 63770). Centrifugal machine, D. M. Weston, F. Cas. 17454.
2,909 (original 56102). Cultivator, J. S. & I. Rowell, 6 F. 290; 113 U. S. 97.
2,942 (original 4472). Hat body, machine for making, H. A. Wells, F. Cas. 17394; F. Cas. 17395; F. Cas. 17396; F. Cas. 17-398; F. Cas. 17399; 10 F. 471; 17 F. 529; 22 Wall. 1.
2,951 (original 46300). Harvester rake and reel, S. Johnston, F. Cas. 4015.
2,979 (original 14722). Pulvurulent acid, E. N. Horsford, F. Cas. 12132; F. Cas. 12133; F. Cas. 12134; F. Cas. 12135; F. 12136; F. Cas. 12814; 32 F. 608.
2,982 (original 14350). Harvester rake, O. Dorsey, F. Cas. 4014; F. Cas. 4015.
2,994 (original 21712) Hay rake, G. Whitcomb, F. Cas. 2033; F. Cas 4279; 9 F. 450.
3,000 (original 62492). Fluting machine, G. E. King, F. Cas. 7799; F. Cas. 7809; F. Cas. 7947; 96 U. S. 218.
3,001 (original 62492). Fluting machine, G. E King, F. Cas. 7799; F. Cas. 7809.
3,014 (original 9653). Corded elastic fabric, W Smith, F. Cas. 13-041; F. Cas. 13050; F. Cas. 13084; 21 Wall 112.
3,070 (original 26329). Boot and shoe tip, N. Silverthorn, F. Cas. 317
3,082 (original 21576) Lamp, C. Reichman, 17 Wall. 463.
3,094 (original 61796). Plow, J. C. Bethea, 4 Fish 248.
3,117 (original 51991). Breech loader, H. Berdan, 26 Ct of Cls. 48.
3,118 (original 51991). Breech loader, H. Berdan, F Cas. 1336; 25 Ct. of Cls. 356.
3,119 (original 78932). Preserving meat, W. Davis, 22 F. 833.
3,143 (original 71680). Machine for making tin cans, C. Barry, F. Cas. 1061.
3,204 (original 70447). Blast furnace, F.W.Lurmann, 27 F. 684; 145 U. S. 226.
3,217 (original 46553). Machine for stretching hat bodies, R. Eickemeyer, F. Cas. 4312.
3,218 (original 40084). Marking clothes in sewing machine, F. Cas. 5151; 94 U. S 299.

3,243—3,665

3,243 (original 71241). Car axle boxes, T. B. Stewart, 21 F. 47.

3,247 (original 74328). Machine for sewing carpet linings, J. F. Fales, 86 F. 906.

3,252 (original 31734). Preserving fruit, B. M. Nyce, F. Cas. 2669.

3,265 (original 41788). Regenerator furnace, C. W. & F. Siemens, 16 F. 856; 123 U. S. 276.

3,268 (original 10903). Clapboard joint, W. Baker, F. Cas. 4578.

3,274 (original 72110). Pavement, H. W. Stow, F. Cas. 13512; 104 U S. 547.

3,323 (original 60657). Cushion for billiard table, L. Decker, F. Cas. 3724; F. Cas. 3725; F. Cas. 3726; F. Cas. 3727.

3,335 (original 42842). Electro magnetic telegraph, S. F. Day, F. Cas. 3672.

3,372 (original 19377). Harvester, F. Nishwitz, F. Cas. 13248.

3,434 (original 38694). Hydrant, J. G. Murdock, F. Cas. 9516.

3,438 (original 62807). Coal scuttle, Bardell & Smith, F. Cas. 5885a.

3,442 (original 64410). Forming letters on type block, D. A. Draper, F. Cas. 4069.

3,445 (original 12956). Miter machine, G. W. La Baw, F. Cas. 7960; F. Cas. 7961.

3,460 (original 18975). Mowing machine, S. E. & M. P. Jackson, F. Cas. 7132.

3,483 (original 40590). Wrench, G. C. Taft, 9 F. 905.

3,517 (original 23361). Machine for pegging shoes, A. C. Gallahue, F. Cas. 5198

3,523 (original 28482) Coal stove, J. C. Henderson, F. Cas. 6351.

3,531 (original 11608). India rubber manufacture, D. Hayward, F. Cas. 2397; F. Cas. 2398.

3,533 (original 9947). Machine for pegging shoes, A. C. Gallahue, F. Cas. 5198.

3,570 (original 81010). Cases for rotary blowers, P. H. & F. M. Roots. F. Cas. 12040; 97 U. S 224.

3,576 (original 41887). Ink, L. Francis, F Cas. 5039.

3,579 (original 54554). Elastic packings, N. Jenkins, F. Cas. 2855; F. Cas. 7271; F. Cas. 7275; F. Cas. 10109; 4 F. 437.

3,609 (original 71560). Plow, G. Watt, 17 O G. 1092.

3,612 (original 86115). Tube for distilling oils, B. P. Van Marter, F. Cas. 16863.

3,618 (original 44561). Feed water feeder, E. R. Stilwell, F. Cas. 13453.

3,624 (original 56345). Corset spring, S. H. Barnes, F. Cas. 1022.

3,633 (original 88216). Ore and stone crusher, J. W. Rutter, 22 F. 459; 55 F. 409.

3,665 (original 48366). Tremolo, R. W. Carpenter, F. Cas. 6538; F. Cas. 6539; F. Cas. 6540; F. Cas. 12411; 23 Wall. 518.

3,682 (original 22990). Mop head, L. Taylor, F. Cas. 13792.

3,690 (original 39235). Rock drill, R. Leschot, F. Cas. 296; F. Cas. 297; F. Cas. 298; 1 F. 870; 15 F. 608; 21 F. 74; 25 F. 768.

3,727 (original 58962). Steam safety valve, W. Naylor, F. Cas. 577; 97 U. S. 189.

3,744 (original 74613). Lead pipe, Shaw, 11 F. 711.

3,747 (original 42520). Lantern, W. Westlake, F. Cas. 3557; F.Cas. 3558.

3,768 (original 23033). Hose coupling, Lawton & Bliss, F.Cas.1544; F. Cas. 1546; F. Cas. 1547.

3,794 (original 8861). Smut mill, D. Shaw, F. Cas. 7911.

3,798 (original 16797). Fire arms, W. C. Hicks, F. Cas. 11701; F. Cas. 11702.

3,810 (original 76993). Printing telegraph, E. A. Calahan, 17 F.234; 19 F. 419; 22 F. 838; 23 F. 340.

3,815 (original 56686). Cooking stove, Bussey & McLeod, 110 U. S. 131.

3,816 (original 93910). Preparation of leather, N. C. Russell, F.Cas. 12161; 19 Wall. 433; 93 U. S. 460; 94 U. S. 606.

3 826 & **3,827** (original 27898). Reflector, I. P. Frink, F. Cas. 5128.

3 852 See Reissue 5294

3,856 (original 56365). Fluting machine, S. G. Cabell, F. Cas. 7910.

3,861 (original 53633). Fluting machine, Knox & Corrister, F. Cas. 7910.

3,863 (original 36854). Pencil, J. Reckendorfer, F. Cas. 11625; 92 U. S 347.

3,869 (original 48048). Watchman's time detector, J. E. Buerk, F. Cas. 2106; F. Cas. 2107; F. Cas. 2107a; F. Cas. 2108; F. Cas. 2109; 101 U. S. 464

3,909 (original 39280) Knob latch, H. H. Elwell, F. Cas. 10355.

3,932 (original 28016). Cultivator, I. R. Smith, F. Cas. 2317; 8 F. 755.

3,938 (original 59913). Fluting machine, S. R. Knox, F. Cas. 7910.

3,946 (original 22094). Breech loader, J. Symmes, F. Cas. 11915.

3,976 (original 90268). Grain drill, J. Ingels, F. Cas. 7033; F. Cas. 7034.

3,995 & **3,996** (original 8589). Machine for making brass kettles, H. W. Hayden, F. Cas. 17254.

4,006 (original 53251). Coal burner, D. G. Littlefield, F. Cas. 11008; F. Cas. 12240a.

4,026 (original 15753). Oven, H. Ball, F. Cas. 815; 102 U. S. 128; 102 U. S. 230.

4,027 (original 13563). Steam gauge cock, A. Bisbee, F. Cas. 3549.

4,066 (original 60476). Carpet lining, G. W. Chipman, F. Cas. 4623.

4,071 (original 52439). Whip socket, C. B. Morehouse, F. Cas. 9461.

4,072 (original 44528). Glue, E. Goddard, F. Cas. 9607; 97 U. S. 3.

4,090 (original 9807). Saw, J. H. Tuttle, F. Cas. 17500.

4,091 (original 93369). Grain drill, Thomas & Mast, 23 F. 348; 28 F. 367.

4,106 (original 85814). Pavement, C. Guidet, F. Cas. 5857; F. Cas. 5858; F. Cas. 5859; 105 U. S. 550.

4,116 (original 17520). Carriage wheel, J. D. Sarven, F. Cas. 12369; F. Cas. 12370.

4,134 (original 95517). Composition for covering boilers, Riley & Bissell, F. Cas. 16787; F. Cas. 16788; F. Cas 16789.

4,137 & 4,138 (original 91474). Water closet, Moule & Girdlestone, F. Cas. 4249.

4,143 (original 38175). Letter stamp, M. P. Norton, F. Cas. 2361; 2 F. 338; 2 F. 357; 5 F. 804; 5 F. 806; 12 F. 150; 104 U. S. 356; 4 Ct. of Cls. 440.

4,165 (original 53584). Well reservoir, Dewey & Tillotson, F. Cas. 14051.

4,187 (original 35856). Augur handle, J. M. Horton, F. Cas, 9599.

4,192 (original 94064). Plated metal bracelet, J. Barclay, F. Cas. 978.

4,196 (original 46871). Sewing machine tuck marker, J. Bolton, 15 F. 455.

4,202 (original 10280). India rubber and steel spring, E. T. Bussell, F. Cas. 10051.

4,212 (original 83005). Car and wagon unloading apparatus, N. Swickard, 26 F. 308.

4,223 (original 100121). Children's carriage, W. E. Crandall, 8 F. 808; 11 F. 902.

4,240 (original 17899). Fare box, J. B. Slawson, 4 F. 531; 107 U. S. 649.

4,281 (original 15044). Harvester, H. F. Mann, F. Cas. 9034.

4,289 (original 82606). Shawl strap, G. Crouch, F.Cas.3437; F.Cas. 3438; 103 U. S. 797.

4,296 (original 52835). Carpet lining, J. Fales, F. Cas. 4623; 86 F. 906.

4,297 (original 108257). Electric burglar alarm, W. B. Guernsey, 42 F. 220.

4,317 (original 44073). Extension table slide, Carter & Mets, F. Cas. 2478.

4,321 (original 95465). Artificial alizarine, Graebe & Liebermann, F. Cas. 719; F. Cas. 720; F. Cas. 721; F. Cas. 722; 111 U. S. 293.

4,334 (original 61207). Stem-setting watch, J. Gurgensen, F. Cas. 7586.

4,349 (original 55469). Fluting machine, H. H. Cole, F. Cas. 10150.

4,361 (original 92820). Oil cup, J. P. Haines, 26 F. 625.

4,364 (original 105599). Concrete pavement, J. J. Schillinger, F.Cas. 12456; F. Cas. 12457; F Cas. 12458; 8 F. 821; 17 F. 244; 17 F. 735; 21 F. 510; 31 F. 736; 33 F. 289; 33 F. 872; 52 F. 297; 31 O. G. 1044; 4 MacKay (D.C.) 450; 24 Ct. of Cls. 278; 119 U. S. 401; 130 U. S. 456.

4,372 (original 73425) Driven well, N. W. Green, F Cas. 371; F. Cas. 372; F. Cas. 379; F. Cas. 380; F. Cas. 382: F. Cas. 5757; 7 F. 477; 8 F. 269; 11 F. 591; 12 F. 871; 15 F. 109; 16 F. 387; 19 F. 420; 55 F. 516; 22 O. G. 683; 122 U. S. 40; 122 U S. 71; 123 U. S. 267; 124 U. S. 720.

4,383 (original 25843). Plow, T. McQuinston, F. Cas. 14244; 14 F. 108.

4,400 See Reissue 8801.

4,418 (original 21161). Reducing wood to paper pulp, H. Voelter, F. Cas. 9559.

4,467 (original 107817). Boiler for stove, W. B. Scaife, F. Cas. 12-426a.

4,479 (original 113832). Treating coffee, J. Ashcroft, 20 F. 315.

4,484 (original 20719). Mowing machine, W. F. Ketchum, F. Cas. 7741; 8 F. 586.

4,488 (original 30092). Permutation lock, G. Rosner, 117 U. S 554.

4,509 & **4,510** (original 80774). Machine for making loom harness, J. Sladdin, F. Cas. 4470.

4,533 (original 76343). Rolling plow colters, J. C. Pfeil, 16 F. 658.

4,588 (original 76654). Induction coil and circuit breaker, C.G.Page, 1 F. 304; 2 F. 330; 7 F. 351.

4,598 (original 40515). Paint for ship's bottom, Tarr & Wonson, F. Cas. 13757; F. Cas. 17933.

4,599 (original 40515). Paint for ship's bottom, Tarr & Wonson, F. Cas. 13756; F. Cas 17934.

4,608 (original 49141). Crucible and pots for melting steel, G. Nimmo. F. Cas. 11121; F. Cas. 11122; 104 U. S. 310.

4,653 (original 83924). Fluting machine, S. G. Cabell, F. Cas. 7910.

4,672 & **4,673** (original 8724). Harvester attachment, W. F. Ketchom, F. Cas 7741; 8 F. 586.

4,675 (original 18249) Hand stamp, T. J. Robertson. F. Cas. 11924; F. Cas. 11925; F. Cas. 11928.

4,695 (original 77512). Damper for hot air furnace, A. H. Mershon, 24 F. 741.

4,696 (original 57574). Permutation lock, J. Sargent, F Cas. 12366; F. Cas. 13367; 117 U. S. 536.

4,698 (original 52726). Adjustable window screen, A. B. Magoun, F. Cas. 81.

4,712 (original 19984) Cooling and drying meal, J. Deuchfield, F. Cas. 6422; F. Cas. 6424; 4 F. 334; 107 U S 640.

4,731 (original 20616) Furnace for burning wet fuel, G Bantz, F. Cas. 967; 105 U. S. 160.

4,775—5,156

4,775 (original 101583). Registering steam gauge, E. Clarke, F.Cas. 16794.

4,777 (original 94947). Machine for closing seams of metallic cans, E. T. Covell, 2 F 359.

4,780 (original 95466). Carriage body and seat, S.P.Graham, F. Cas. 3082.

4,793 (original 19637). Grain separator, Howes & Throop, F. Cas. 6789; 17 O. G. 799.

4,818 & **4,819** (original 50617). Nitroglycerine compound, A. Nobel, F. Cas 5379; 98 U. S. 126.

4,831 (original 45296). Corset skirt supporter, L. H. Foy, F. Cas. 5017; F. Cas. 5018; F. Cas. 5019.

4,864 (original 76834). Paper file, Smith & Cheever, F. Cas. 13128a.

4,870 (original 17331). Fastening metallic covering, A. Johnson, F. Cas. 7384; 105 U. S. 539.

4,887 (original 19206). Hydrant casing, Race & Matthews, 105 U. S. 54.

4,896 (original 59144). Bale tie, C. Swett, F. Cas. 7371.

4,903 See Reissue 5563.

4,937 (original 33808). Flocking machine for rubber, I F. Williams, 2 F. 649.

4,977 (original 111962). Rubber overshoes, Meyer & Evans, F. Cas. 9517; 11 F. 891.

4,994 (original 88834). Fire extinguisher, D. Miles, F Cas. 10337.

5,007 (original 65186). Soap, Eames & Seely, 7 F. 100.

5,026 & **5,027** (original 118617). Wrench for extracting bung bush, Lacey & Cornell, F. Cas. 3236; F. Cas. 3238; 96 U. S. 549.

5,027 See Reissue 8759.

5,050 (original 120638). Spark arrester, G. H. Griggs, F. Cas. 11-163.

5,067 (original 77482). Suspension rings for business cards, H S. Griffiths, 8 F. 154.

5,081 (original 101994). Elastic roller manufacture J. B. Forseyth, F. Cas. 4949.

5,132 (original 87413). Water supply regulator, B. Holly, F. Cas. 6624; 4 F. 74.

5,150 (original 88365). Take-up mechanism for looms, Carstaedt, F. Cas 2467; F Cas. 2468.

5,154 (original 28314). Turbine water wheel, A. M. Swain, F. Cas. 13662; 102 U. S. 408.

5,155 (original 123603). Dies for rubber coated harness, A. Albright, F. Cas. 147; 35 F. 499.

5,156 (original 123603). Process of coating harness with rubber, A. Albright, 35 F. 499.

5,174 (original 112930). Tiling for fire-proof building, B. Kreischer, 19 F. 756; 20 F. 916.

5,180 (original 21659). Sewing machine guide, A. Douglas, F. Cas. 18039; F. Cas. 18040; 26 F. 274; 114 U S. 104; 119 U. S. 322.

5,184 (original 113528). Spark arrester for locomotive, Kearney & Tronson, 27 F. 699; 32 F. 320; 158 U. S. 461.

5,186 (original 106101) Cloth cutting machine, A. Warth, F. Cas. 17209a.

5,193 (original 110222). Hydraulic mining apparatus, F. H. Fisher, F. Cas. 4817. See Reissue 8876

5,197 See Reissue 8163

5,207 (original 78644). Finishing horseshoe nails, S E. Chase, 19 F. 819; 27 F. 454.

5,216 (original 56345). Corset spring, S. H. Barnes, F. Cas 4306; 104 U. S. 333.

5,223 (original 61680). Clothes wringer, A. H. Page, F. Cas. 9508.

5,256 (original 108753). Cheese press, Boomer, Boschert & Morse, F. Cas. 1638.

5,259 (original 23771). Cuffs and collars, W. E Lockwood, F. Cas. 14394.

5,274 (original 94469). Hand car for railroad, H. L. Brown, F. Cas. 2012.

5,282 (original 12175). Machine for making weavers harness, J. S. Winsor, F. Cas. 7694; F. Cas. 7695; F. Cas. 7696

5,294 (original 50364). Wrench, Jordan & Smith, 3 F. 225; 8 F. 517. 21 F. 38; 130 U. S. 56.

5,312 (original 125421). Bed bottom, Turnbull & Webb, 20 F. 119.

5 328 (original 133217). Lubricator, W. T. Garratt, F. Cas. 12845; 98 U. S. 75.

5,333 (original 23291). Bale tie, G. Brodie, F. Cas. 293; F. Cas. 294; F. Cas. 295; 106 U. S. 89.

5 366 (original 61900). Hub, A. Warner, F. Cas. 5937.

5,400 (original 70627). Whip socket, E. W. Scott, F. Cas 12587; 11 F 501; 121 U. S. 14.

5,408 (original 93449). Machine for graduating carpenter's square, H. K. Jones, F. Cas. 6156.

5,435 (original 51292). Reservoir cooking stove, E. Bussey, F. Cas. 2230; F. Cas. 2231.

5,487 (original 81432). Machine for rolling saw logs, E. E. Tarrant, 30 F 830; 112 U S. 659.

5,502 (original 129210). Nail extractor, G. J. Capewell, 35 F. 206; 37 F. 689.

5,504 (original 88929) Steam power car brake, G. Westinghouse, Jr., F. Cas. 17450.

5,506 (original 115667). Steam power car brake, G. Westinghouse, Jr., F. Cas. 17450.

5,514—5,894

5,514 (original 106094). Spittoon, W. H. Topham, 21 F. 404; 21 F. 406.
5,544 (original 63418). Water tank for railway, J. Morton, 15 F. 398.
5,549 (original 123670). Steam trap, J. H. Blessing, 20 F. 633.
5,557 (original 108384). Cultivator, C P. Norton, 9 F. 821.
5,563 (original 114624; 1st Reissue 4903). Bustle, A. W. Thomas, 33 F. 275.
5,590 (original 131616). Water wheel and sewing machine combined, I. Hyde, 17 F. 350.
5,624 (original 78769). Machine for making curved augers, J. Swan, F. Cas 2050.
5,630 (original 129844). Device for steering canal boats, J. McCreary, 5 F. 367; 141 U. S. 459.
5,644 (original 62406) Step cover, J. W. Gosling, 106 U. S. 39.
5,648 (original 121569). Preserving vegetables and animal substances, C. Alden, 24 F. 787.
5,651 (original 132909). Whip stock manufacture, D. C. Hull, 4 F. 536.
5,701 (original 42572). Sheep shearing device, A. J. Fullam F. Cas. 4246.
5,713 (original 43858). Whip socket, C. B. Morehouse, F. Cas. 9462.
5,718 (original 51928). Shedding mechanism for looms, G Compton, 7 F. 199.
5,748 (original 117831) Show-case sockets, J. W. Truby, 99 U. S. 592
5,774 (oaiginal 147045). Chain etc. for necklace, S Cottle, F. Cas. 9907; F. Cas. 9908; 102 U. S. 112.
5,785 (original 143770). Mode of lining oil barrels with glue, E. W. Leggett, 38 F. 842; 149 U. S. 287.
5,786 (original 14510). Cooling and ventilating, A. S. Lyman, F. Cas. 8631; F. Cas. 8632.
5,798 (original 50617). Exploding nitro-glycerine, A. Nobel, F. Cas. 624; 21 F. 519.
5,799 (original 78317). Explosive compound, A. Nobel, F Cas. 623; F. Cas. 624; F. Cas. 625; F. Cas. 626; 1 F. 328; 4 F. 720; 5 F. 196; 9 F 316; 98 U. S. 126.
5.800 (original 50617). Exploding nitro-glycerine, A. Nobel, F. Cas. 624; 98 U. S. 126.
5,804 (original . 1145). Pump filter. J. Christman, F. Cas. 2704.
5 806 (original 109372). Water meter, Ball & Fitts. 101 U. S. 337.
5,841 (original 37317). Bolting flour, W. F Cochrane. F. Cas. 305; F. Cas 306; F. Cas. 307; F. Cas. 308; 94 U. S. 78; 95 U. S. 355.
5,868 (original 146012). Treating animal fats. H. Mege, F. Cas. 15-687; 19 F. 97. See Reissue 10137.
5,894 (original 67283). Stove, C. H. Frost, 12 F. 436.

5,903 (original 37446). Machine for cutting caoutchouc, L. Hull, F. Cas. 1675.

5,925 (original 81743). Apparatus for rendering lard, A. Broadnax, 4 F. 214.

5,928 (original 105338). Treating pyroxiline, J. W. & I. S. Hyatt, F. Cas. 2543.

5,929 See Reissue 10546.

5,937 (original 148747). Bung for cask, P. Pentlarge, F. Cas. 10963; F. Cas 10964; F. Cas. 10964a; 1 F. 862; 31 F. 76.

5,940 (original 77938). Artificial ivory, W. M. Welling, 12 F. 875; 32 F. 294; 34 F. 40.

5,951 (original 76773). Roofing composition, H. W. Johns, F. Cas. 16788.

6,016 (original 127159). Bobbin and spindle, G. Draper, F. Cas. 4072.

6,018 (original 139348). Carriage spring, T. H. Wood, 14 F. 694; 37 F. 785.

6,021 (original 137786). Hook attachment for musket, I. Merrill, 23 Ct. of Cls. 335.

6,030 (original 37318). Bolting flour, W. F. Cochrane, F. Cas. 305; F. Cas. 307; F. Cas. 308; 94 U. S. 781; 95 U. S. 355.

6,036 (original 102587). Bobbin and spindle, O. Pearl, F. Cas. 10876; 3 F. 153.

6,050 (original 62342). Tools for manufacture of paper bags, E. J. Howlett, 6 F. 398.

6,076 (original 102179). Folding chair, A. W. Stewart, 5 F. 302.

6,080 (original 124218). Cultivator, J. H. Pattee, 9 F. 821; 23 F. 801; 129 U. S. 295.

6,098 & **6,099** (original 122030). Boot and shoe pacs, Kelleher & Raudlett, F. Cas. 7653.

6,100 (original 97418). Corsets, H. A. Lyman, F. Cas. 13982.

6,101 (original 133601). Windmill, E. & D. C. Stover, 24 F. 650.

6,113 (original 123927). Dies for forging ox shoes, B. S. Parker, 25 F. 101.

6,117 (original 88830). Cheese manufacture, Andrews & Ogden, 14 F. 471.

6,129 (original 148368). Self lubricating axle, W. Jones, F. Cas. 7461.

6,131 (original 30357). Plow, M. G. Slemmon, 11 Otto 256.

6,162 (original 127090). Heel stiffener, J. R. Moffitt, F. Cas. 9691; 106 U. S. 423.

6,169 (original 139820). Cotton gin, P. C. Sawyer, 12 F. 725; 25 F. 144.

6,206 (original 100335). Base burning stove, J. Spear, 12 F. 436.

6,249 (original 80492). Apparatus for removing obstructions under water, S. Lewis, F. Cas. 2344.

6,258—6,550

6,258 (original 59936). Method of increasing capacity of oil wells, E. A. L. Roberts, 2 F. 855; 14 F. 167.
6,274 (original 85472). Grain drill, C. E. Patric, 23 F. 348.
6,291 (original 43669). Manufacture of bolts, W. J. Clark, F. Cas. 2826.
6,315 (original 142154). Machine for cutting paper boards, J. Eachus, 115 U. S. 429.
6,319 (original 117627), Apparatus for crimping the stiffening of boots and shoes, J. W. Hatch, 15 F. 252.
6,321 (original 152864). Car spring, J. C. Pickles, 16 F. 450.
6,326 (original 60151). Printer's galley, A. T. DePuy, F. Cas. 6573.
6,335 (original 139121). Pantaloons pocket fastener, J. W. Davis, 2 F. 236.
6,337 (original 49129). Drill for boring wells, J. M. May, F. Cas. 12-087.
6,338 (original 53706). Bed bottom, E. W. Tucker, 3 F. 862.
6,350 (original 62232). Stock for bits, C. H. Stockbridge, F. Cas. 9598.
6,369 (original 28495). Skate, J. Lovatt, F. Cas. 14267; F. Cas. 14-268; F. Cas. 14269; 15 F. 808.
6,370 (original 149276). Preserving meat, W. J. Wilson, F. Cas. 17-850; 9 F. 547; 105 U. S. 566.
6,384 (original 46615). Seed planter, G. W. Brown, 6 F. 484; 6 F. 487.
6,386 (original 89025). Spinning ring, W. T. Carroll, F. Cas. 4073.
6,387 See Reissue 10444.
6,388 (original 129338). Heel stiffener, J. W. Hatch, 15 F. 252.
6,397 (original 28130). Baker's oven, D. McKenzie, 102 U. S. 230.
6,404 (original 134045). Machine for forging metallic sockets, Fitch & Shafer, 140 F. 292.
6,422 (original 146614). Steam boiler, H. W. Rice, F. Cas. 11752; 104 U. S. 437.
6,423 (original 80121). Knitting machine, D. Bickford, 2 F. 214.
6,424 (original 92146). Knitting machine, D. Bickford, 2 F. 214
6,451 & **6,452** (original 43516). Preserving meat, W. C. Marshall, F. Cas. 17850; F. Cas. 17851.
6,469 (original 145787). Billiard table, H. W. Collender, 2 F. 206.
6,480 (original 141357). Boot and shoe manufatture, J. L. Joyce, F. Cas. 13407.
6,493 (original 131098). Fly trap, J. M. Harper, 7 F. 355; 15 F. 237.
6,498 (original 67398). Bench plane, L. Bailey, F. Cas. 13287.
6,531 (original 116138). Bucket for chain pump, W. C. Barker, F. Cas. 994; F. Cas. 995; 11 F. 303; 13 F. 473; 15 F. 265; 18 F. 647.
6,542 (original 39134). Egg beater, T. Earle, 111 U. S. 319.
6,550 (original 42292). Sewing machine, A. F. Johnson, F. Cas. 13-865.

6,557 (original 156311). Stereoscope, A. Quirolo, 1 F. 610.
6,565 (original 37550). Ruffler, J. A. Pipo, F. Cas. 18037; 8 F. 429; 9 F. 854; 21 F. 51; 21 F. 67.
6,566 (original 46424). Ruffling machine, T. Robjohn, 8 F. 429; 21 F. 51; 21 F. 67.
6,567 (original 70309). Shuttle box mechanism for looms, H. Wyman, 7 F. 204.
6,580 (original 23950). Clock dial, S. E. Root, 4 F. 423.
6,594 & **6,595** (original 37321). Bolting flour, W. F. Cochrane, F. Cas. 305; F. Cas. 307; 94 U. S. 781; 95 U. S. 355.
6,598 (original 126968). Dredging apparatus, N. J. Keller, 43 F.378.
6,606 (original 155543). Harrow, W. S. O'Brien, 34 F. 787.
6,609 (original 30651). Harvester, S. W. Tyler, 7 F. 775.
6,644 (original 150933). Toy bell, E. C. Barton, F. Cas. 5.
6,648 (original 49992). Sleeping car convertible seat, Field & Pullman, 5 F. 72.
6,739 (original 153250) Overflow valve, J. Foley, 39 F. 210; 42 F. 497; 46 F. 77; restricts 170709, 51 F. 81; 55 F. 876.
6,660 (original 16648). Wagon gearing, E. Huson, F. Cas. 5965.
6,662 (original 155806). Cigar mold, F. C. Miller, F. Cas. 9597.
6,673 (original 111585). Wash board, W. Todd, 22 F. 340; 107 U.S. 636
6,675 (original 117255). Machine for making wooden gutters for buildings, A. K. P. Buffum, F Cas. 2113.
6,693 (original 88318). Sash fastener, McGregor & Vo l, F. Cas. 6695; 103 U. S. 786.
6,697 (original 61482). Street car, J. Stephenson, 1 F. 416.
6,709 (original 50073). Coal stove, Z. Hunt, 12 F. 436.
6,714 (original 52169). Marking wheel, H Holt, 13 F. 464.
6,733 (original 134653). Saw mill dog, H. D. Donn, 13 F. 874.
6,751 (original 130672). Cards for wrapping threads, H. Sutro, 8 F. 909.
6,811 (original 109444). Fly trap, J. Parker, 7 F. 355; 15 F. 237.
6,824 (original 147629). Plow jointer, H. Gale, F Cas. 5191a.
6,831 (original 165438). Gong for fire engine, R. Bragg, 27 F.509; 44 F. 70; 56 F. 292; 63 F. 466; 141 F. 118.
6,833 (original 50938). Gas stove burner, T. J. Kelly, 2 F. 697.
6,844 (original 30381). Lamp, J. E. Ambrose, F. Cas. 9563; 104 U. S 350.
6,846 See Reissue 8781.
6,849 (original 155601). Trunk, H. Vogler, F Cas 16987.
6,902 (original 74379). Barbed fence wire, M. Kelly, F. Cas. 17217; 1 F 225; 4 F. 900; 7 F. 906; 16 F. 661.
6,913 (original 150683). Barbed fence wire, J. F. Glidden, 1 F. 225; 4 F. 900; 7 F. 906; 16 F. 661.
6,925 (original 118725). Curtain fixtures, A. H. Knapp, 15 F 115; 20 F. 790.

6,951—7,286

6,951 (original 146597). Pick, J. C. Klein, F. Cas. 7868.
6,954 & **6,955** (original 129858). Insulating telegraph wire, J. Olmsted, 9 F. 706; 114 U. S 447.
6,962 (original 115565). Apparatus for cleaning privies, H. C. Bull, F. Cas. 10437; 109 U. S. 641.
6,974 (original 95004). Box loop for carriage top, C. H. Davis, 9 F. 659; 20 F. 851.
6,976 (original 67117). Barbed fence wire, W. D. Hunt, F. Cas. 17-217; 1 F. 225; 7 F. 906.
6,979 (original 131936). Base burning stove, Carter & Dywer, F.Cas. 3834.
6,990 (original 75344). Hydrant, T. R. Bailey, Jr., 22 F. 292; 127 U. S. 563.
7,006 (original 90143). Pump, P. Wineman, 18 F. 324.
7,014 (original 155962). Nailing machine for boots and shoes, McKay & Fairfield, 17 F. 516.
7,017 (original 122079; 1st Reissue 4857). Carriage spring, Topliff & Ely, 145 U. S. 156.
7,028 (original 161807). Stock car, J. R. McPherson, 46 F. 782.
7,031 (original 66773). Paint compound, D. R. Averill, 9 F. 462.
7,035 (original 84062). Barbed fence wire, M. Kelly, 4 F. 900.
7,036 (original 84062). Barbed fence wire, M. Kelly, 1 F. 225.
7,046 (original 127098). Base ball cover, J. H. Osgood, F. Cas. 8966; 112 U. S. 354.
7,061 (original 35274). Preserving corn, J. W. Jones, F. Cas. 7479.
7,067 (original 34928). Canning green corn, J. W. Jones, F. Cas. 7479.
7,069 (original 35598). Lamp chimney, W. L. Fish, F Cas. 7724; 1 F. 91.
7,077 (original 49469). Gas stove, E. J. Caldwell, 10 F. 673.
7,120 (original 100715). Fare register, Blackburn & Woodside, F. Cas. 11535.
7,129 (original 61628). Buckle fastening, R. Meyer, F. Cas. 9493a; F Cas. 12485; 11 F. 872.
7,136 (original 66182). Barbed fence wire, L B. Smith, 1 F. 225; 4 F. 900.
7,149 (original 59458). Trunk corner protectors, E. A. G Roulstone, F. Cas. 5635.
7,174 See Reissue 7583.
7,182 (original 129893) Curtain fixture, A. H. Knapp, 15 F. 115; 20 F. 790.
7,203 (original 127045). Chair seat, G. Gardner, F. Cas. 5229.
7,244 (original 49403). Packing for oil wells, F. Martin, 12 F. 865; 38 F. 919.
7,254 (original 92822). Hot air furnace, O. N. Hart, F. Cas. 4875.
7,262 (original 53003). Gage lathe, L. Hull, F. Cas. 319.
7,286 (original 162731). Globe holder, J. White, 8 F. 917; 17 F.159.

7,320 (original 102688). Barber's chair, M. Leidecker, 31 F. 475.
7,321 (original 58020) Lubricant, M. P. Ewing, 20 F. 850.
7,341 (original 140077; 1st Reissue 6211). Coal screen and chute, M. R. Roberts, 69 F. 246; 79 F. 355; 156 U. S. 611.
7,356 (original 147906(. Machinery for forming boot and shoe stiffeners, L. Cote, 8 F. 15; 15 F. 345.
7,362 (original 158604). Plug tobacco label, C. Siedler, F. Cas. 8510; F. Cas. 8511; 9 F. 509; 14 F. 111.
7,367 (original 69176). Shade roller, W. Campbell, 18 F. 90; 119 U. S. 664.
7,368 (original 73697). Knitting machine, T. Crane, F. Cas. 5061; F. Cas. 5061a.
7,370 (original 68502; 1st Reissue 5558). Shade roller, S. Hartshorn, 119 U. S 664.
7,382 (original 74435). Whip tip, C. R. Shelton, 1 F. 87.
7,388 (original 66065). Bale tie, A. Barbarin, 19 F. 233
7,417 (original 123325). Lamp chimney, E. Blackman, F. Cas. 1471.
7,488 (original 152636). Paper boxes, H. R. Heyl, 5 F. 919.
7,494 (original 59319). Packing for oil wells, O. Redmond, 12 F. 865
7,497 (original 69255). Cultivator, J. Schroder, 9 F. 821.
7,510 (original 176094). Boot and shoe manufacture, D. A. Sutherland, 6 F. 903.
7,511 (original 182973) Shade holder for lamp, C Votti, F. Cas. 12-470a; F. Cas. 12470b; 3 F. 95; 10 F. 666. See Reissue 10087
7,556 (original 43463). Decorating tin plates, Rousell, Delangre & Robin, 5 F. 793.
7,558 (original 177296). Sewing machine presser foot, D. A. Sutherland, 6 F. 713.
7,566 (original 157508). Machine for barbing fence wire, Glidden & Vaughan, 1 F. 225.
7,571 (original 81948) Self closing faucet, F. Roach, 9 F. 101.
7,583 (original 159467). Coffee mill, T. Strobridge, 2 F. 692; 6 F. 510; 11 F. 880; 36 F. 922.
7,609 (original 43979). Metal molding and apparatus for making same, A. Destony, 11 F. 149
7,628 (original 183913). Extension lamp fixtures, J. A Evarts, 17 F. 240; 25 F. 907.
7,643 (original 44731). Atmosphere cooler, M. J. Kelly, 6 F. 514; 11 F. 902; 24 F. 645.
7,659 (original 79958). Lamp chimney, R R. Crosby, 8 F. 905; 25 F. 38
7,682 (original 38974). Sheet metal can, H. Miller, 11 F. 152.
7,690 (original 121158). Railroad switch, C. L. Cooke, F. Cas. 3176.
7,704 (original 97375). Bedstead frame, J. M. Farnham, 1 F. 222; 5 F. 812; 7 F. 723; 8 F. 87; 13 F. 893; 23 F. 587.

7,706—8,063

7,706 (original 88287). Vapor burner, L. Fischer, 8 F. 325.
7,722 (original 158406). Bottle stopper, C. De Quillfeldt, 6 F. 882; 6 F. 897; 38 F. 234.
7,729 (original 173124). Corset spring, C. Judson, F. Cas. 7564; 10 F. 752.
7,738 (original 88557). Cultivator, M. Eichholtz, 9 F. 821.
7,751 (original 156149). Coal oil stove, J. A. Frey, F. Cas. 9121; F. Cas. 11686; F. Cas. 11688; F. Cas. 11689.
7,772 (original 46217). Packing for oil wells, J. R. Cross, 12 F. 865; 38 F. 919.
7,779 (original 177953). Enameled iron ware, F. G. & W. F. Niedringhaus, F. Cas. 12240; F Cas. 12240a.
7,786 (original 146085). Printing press sheet deliverer, Mayall, 11 O. G. 1107.
7,795 (original 184983). Door hanger, E. E. Pratt, 64 F. 589; 64 F. 780; 65 F. 98; 65 F. 800.
7,808 (original 166395). Caps, M. Marks, 6 F. 727; 11 F. 900; 24 F. 276; 26 F. 277.
7,851 (original 134790). Cob carrier for corn sheller, H. H. Eby, 158 U. S. 366.
7,860 (original 156267). Sewing machine cutting attachment, L. L. Barber, 10 F. 130.
7,886 (original 41471). Relief valve, T. H. Bailey, 113 U. S. 679.
7,898 (original 190211). Rail carrying apparatus, A. J. Gustin, 47 F. 508; 53 F 120.
7,909 (original 159921). Necktie, W. H. Hart, Jr., 10 F. 746; 20 F. 696.
7,913 (original 88660). Sheet copper boiler and process of making same, A. O'Neill, 13 F. 234.
7,920 (original 113328). Waterproof collar, T. New, 3 F. 714.
7,923 (original 161848), Sheet metal can, W. J. Wilson, F. Cas. 17-850; F. Cas. 17851; 9 F. 547; 105 U. S. 566.
7,947 (original 195539). Combined time lock, J. Sargent, 6 F. 377; 17 F 531; 135 U. S. 342.
7,972 (original 59915) Velocipede, P. Lallemant, 15 F. 400.
7,984 (original 132639). Hay and cotton press, P. K. Dederick, 9 F. 306.
7,985 (original 38807). Sewing machine, C. F. Bosworth, 6 F. 181.
7,988 (original 69713). Horse hay rake, J. H. Shireman, 2 F. 781; 7 F. 485.
8,013 (original 165832). Fare register, W. H. Hornum, F. Cas. 6703.
8,014 (original 171133). Fare register, W. H. Hornum, F. Cas. 6703.
8,025 & **8,026** (original 191656). Apparatus for pumping fluids from casks, W. F. Class, 17 F. 250.
8,060 (original 185119). Finishing plug tobacco, Miller & Worley, 1 F. 203; 9 F. 603; 116 U. S. 22.
8,063 See Reissue 9097.

8,076 (original 70728). Circular saw, J. K. Lockwood, 4 F. 423.
8.091 (original 62378). Egg transporting case, J. L. & G. W. Stevens, F. Cas. 8847; 8 F. 519; 8 F. 521; 11 F. 425; 15 F. 804; 16 F. 412.
8,099 (original 85526). Washing shavings, F. Hinckel, 12 F. 621.
8,106 (or ginal 165110). Pocket book clasp, L. Messer, 7 F. 914.
8,114 (original 189405). Corset, I. D. Warner, 7 F. 468.
8,121 (original 110839). Drive-screw, D. F. Fetter, 17 F. 841; 20 F. 113; 20 F. 114.
8,123 (original 163794). Pocket book clasp, L. Messer, 7 F. 914.
8,127 (original 177851). Brick machine, P. H. Kells, 9 F. 284.
8,130 (original 132566). Hay and cotton press, P. K. Dederick, 9 F. 306.
8,142 See Reissue 9148.
8,163 (original 129346; 1st Reissue 5197). Machine for making shoe shanks, J. Hyslop, 32 F. 398; 39 F. 610.
8,167 (original 190263). Signal cartridge, E. W. Very, 33 Ct. of Cls. 438.
8,169 (original 197807). Collars, W. Wilson, 6 F. 611; 113 U.S. 268.
8,186 (original 129901). Process for rendering leather flexible, E. Osgood, 23 F. 79.
8,195 (original 200068). Book binding, J. S. Lever, 11 F. 155.
8,199 (original 183347). Pocket check book, G. E. Waring, Jr., 6 F. 500.
8,252 (original 46705). Velocipede, H. A. Reynolds, 15 F. 400.
8,276 (original 161659). Rivet setting machine, M. Bray, 26 F 706.
8.286 (original 142323). Steam trap, J. H. Blessing, 20 F. 633; 24 F. 699.
8,291 (original 157951). Pipe coupling, G. Westinghouse, Jr., 32 F. 484.
8,292 (original 151477). Hay and cotton press, P. K. Dederick, 9 F. 306.
8,296 (original 177216). Hay and cotton press, P. K. Dederick, 9 F. 306.
8,298 (original 93441). Take-up for loom, G H Holmes, 9 F. 757.
8,312 (original 132639). Hay and cotton press, P. K. Dederick, 9 F. 306.
8,316 (original 132566). Hay and cotton press, P. K. Dederick, 9 F. 306.
8,357 (original 165381). Paper bag machine, C. B. Stilwell. 29 F. 96.
8,364 (original 143396). Squib for blasting, S. H. Daddow, 24 F. 277.
8,386 (original 155374). Middlings purifier, A. R. Guilder, 9 F. 155.
8,388 (original 125547). Railway track cleaner, A. Day, 23 F. 189; 132 U. S. 98
8,391 (original 43636). Burrs for knitting machine, W. H. Carr, 11 F. 83.
8,393 (original 196006). Window cleaner, W. C. Gayton, 2 F. 574.
8,424 See Reissue 10137.

8,438 (original 111632). Planing machine, Goodrich & Colburn, 14 F. 652.

8,440 (original 187279). Machine for making gelatine capsules, F. A. Hubel, 35 F. 414.

8,443 (original 93472). Wind mill, C. P. Perkins, 17 F. 344.

8,460 (original 193867). Process for waxing paper, S. Hammerschlag, 7 F. 584; 9 F. 43; 10 F. 479; 18 F. 175; 28 F. 621; 32 F. 586; 35 F. 66; 35 F. 67; 38 F. 430.

8,463 (original 193563). Refrigerator, G. F. Smith, 47 F. 324.

8,466 (original 104412). Soldering iron, J. A. Bostwick, 5 F. 593; 111 U. S. 97.

8,475 (original 76760). Hay rake, C. B. Holden, 7 F. 922.

8,483 (original 141473). Bushing for faucet hole, S. R. Thompson, 9 F. 199.

8,490 (original 50860). Pocket lighter, Tyler, Chandler & Standish, 9 F. 390.

8,491 (original 51167). Packing for oil wells, Fowler & Morgan, 12 F. 855.

8,520 (original 112937). Trunk fastening, J. C. Locke, 17 F. 450.

8,521 (original 74723). Trunk fastening, E. Semple, 17 F. 450.

8,536 (original 190655). Shoe tip, H. White, 3 F. 222; 4 F. 916; 14 F. 789.

8,541 (original 122545). Buckle, H. S. Woodruff, 32 F 224.

8,550 (original 146832). Time lock, S. A. Little, 6 F. 377; 17 F. 531; 26 F. 104; 32 F. 168; 38 F. 917; 135 U. S. 342.

8,562 (original 148094). Pipe moulding machine, F. Shickle, 29 F. 866.

8,581 (original 70075). Whip socket, Curtis & Worden, 11 F. 505; 13 F. 716; 21 F. 406; does not infringe Reissue 5400, 121 U. S. 14.

8,589 (original 74515). Grain drill, C. F. Davis, 9 F. 647; 116 U. S. 238.

8,590 (original 116935). Skate, C. T. Day, 15 F. 810; 22 F. 828.

8,594 (original 139784). Wire cage, M. Grebner, 9 F. 99.

8,597 (original 94203). Ventilator, G. Hayes, F. Cas. 6261b; 5 F. 521; 11 F. 87; 12 F. 120; 20 F. 690; 18 O. G. 1406.

8,598 (original 89770). Lamp, J. H. Irwin, F. Cas. 7081; 8 F. 314; 11 F. 718; 21 F. 514.

8,611 (original 73012). Lamp, J. H. Irwin, 8 F. 314; 21 F. 514.

8,615 (original 129018). Seed steaming apparatus, W. B. Fisher, 23 F. 891; 26 F. 242.

8,631 (original 175588). Pump, R. Bean, 68 F. 213; 76 F. 816.

8,637 (original 184577; 1st Reissue 7850). Process of refining and bleaching hair, J. Bene, 129 U. S. 683.

8,672 (original 64910). Sash supporter, C. A. Schaefer, 8 F. 605.

8,674 (original 100143). Sky light, G. Hayes, F. Cas. 6261b; 5 F. 521; 11 F. 87; 12 F. 120; 21 F. 567; 18 O. G. 1406.

8,675 (original 106157). Skylight, G. Hayes, F. Cas.6261b; 5 F.521; 11 F. 870; 12 F. 120; 20 F. 690; 21 F. 567; 23 F. 183; 18 O. G. 1406.

8,676 (original 143149). Skylight, G. Hayes, F. Cas.6261b; 5 F.521; 20 F 690; 18 O. G. 1406.

8,688 (original 112594). Skylight, G. Hayes, F.Cas. 6261b; 5 F.521; 11 F. 87; 12 F. 120; 20 F. 690; 23 F. 183; 18 O. G. 1406.

8,689 (original 143153). Skylight, G. Hayes, F. Cas.6261b; 5 F.521; 12 F. 120; 20 F. 690; 21 F. 567; 23 F. 183; 18 O. G. 1406.

8,694 (original 100053). Dies, R. P. Miller, 8 F. 608; 114 U. S. 523.

8,718 (original 203411). Electric lamp, C. F. Brush, 20 F. 826; 132 U. S. 39.

8,719 (original 68808). Carriage axle, W. C. Tucker, 11 F. 510.

8,740 (original 94780). Lubricator, N. Siebert, 4 F. 328.

8,752 (original 171425). Boiler covering, J. C. Reed, 48 F. 446; 52 F. 228.

8,755 (original 213992). Bottle stopper, C. G. Hutchinson, 26 F. 531.

8,759 (original 118517; 1st Reissue 5027). Bushing for cask bung, Lacey & Cornell, 127 U. S. 261.

8,765 (original 197545). Wheel harrow, J. S. Corbin, 52 F. 749; 60 F. 417.

8,781 (original 103125; 1st Reissue 6846) Soldering iron, A.Barker, 5 F. 593; 36 F. 901; 63 F. 827; 111 U. S. 97.

8,783 (original 119212). Postoffice box, L. Yale, Jr., 3 F. 288; 15 F. 342; 20 F. 903; 125 U. S. 447.

8,784 (original 82262). Vapor burner, C Wintergerst, 15 F. 459.

8,786 (original 52448). Packing for deep wells, Robinson & Strong, 38 F 919.

8,801 (original 84627; 1st Reissue 4400). Printing machine, Hoe & Tucker, 27 F. 204.

8,826 (original 68674). Wind mill, L. H. Wheeler, 17 F. 344.

8,829 (original 47574). Harness buckle, C. W. Saladee, 11 F. 868.

8,832 (original 112977). Cheese hoops, W. Stermbergh, 3 F. 636; 12 F. 567; 22 F. 1294.

8,834 (original 128411). Soda fountain, J. Matthews, 19 F. 321; 19 F. 649; 21 F. 641; 124 U. S. 347

8,837 (original 137702). Soda fountain, J. Matthews, 19 F. 321; 21 F. 641.

8,840 (original 189432). Lumber drier, Curran & Wilcox, 20 F. 839; 29 F. 320; 31 F. 918.

8,846 (original 161490). Lumber drier, Curran & Wilcox, 20 F. 839; 29 F. 320; 31 F 918.

8,854—9,247

8,854 (original 55614). Cutting corn from cob, Burt & Dunn, 11 F. 597.
8,866 (original 206141). Coffee and spice mill, A. Shepard, 2 F. 688.
8,867 (original 124590). Brick machine, P. H. Kells, 9 F. 248.
8,868 (original 199244). Hub, C. K. Wilcox, 31 F. 224.
8,876 (original 110222; 1st Reissue 5193). Hydraulic mining apparatus, F. H. Fisher, 125 U. S. 217.
8,883 (original 87359). Apparatus for lining paper board, H. L. Palmer, 3 F. 456.
8,891 (original 113649). Fire alarm telegraph, J. N. Gamewell, 7 F. 351.
8,894 (original 111001). Filter, L. Raecke, 16 F. 566.
8,896 (original 92275). Fire alarm signal, M. G. Crane, 7 F. 351.
8,914 (original 215548). Railroad frog, F. C. Weir, 21 F. 243; 125 U. S. 98.
8,962 (original 208595). Artificial honey-comb foundation, J. E. Hetherington, 18 F. 596.
8,986 (original 58612). Gang plow, F. S. Davenport, 14 F. 465; 119 U. S 373.
9,002 (original 156302). Bottle stopper, J. Miller, 4 F.411; 11 F.75; 12 F. 127; 12 F. 131.
9,011 (original 188691). Ore washer, S. Stultz, 20 F. 843; 25 F.147; 54 F. 506.
9,028 (original 50255). Soda water fountain, J. Matthews, 14 F. 350; 15 F. 813; 19 F. 823.
9,043 (original 29561). Boot and shoe manufacture process, L. R. Blake, 5 F. 587; 5 F. 593; 12 F 615; 23 F. 76.
9,046 (original 158869). Rocking chair, C. Streit, 11 F. 309.
9,094 (original 127045). Chair seat, G. Gardner, 12 F. 491; 118 U.S. 180.
9,097 (original 190184). Quilting machine, A. Beck, 19 F. 315; 124 U. S. 32.
9,108 (original 148737). Tobacco curing furnace, J. C. Millner, 48 F. 832.
9,123 (original 93215). Die holder, J. McWilliams, 11 F. 419.
9,129 (original 169830). Treatment of beer, Mussgiller & Schedler, 39 F. 111; 45 F. 572; 48 F. 296.
9,148 (original 95458). Spring tooth harrow, D. L. Garver, 25 F. 94; 28 F. 98; 29 F. 915.
9,176 (original 108827). Sewing machine attachment, Rayer & Lincoln, 19 F. 428.
9,199 (original 110205). Siphon pump, H. Coll, 12 F. 136.
9,202 (original 116842). Satchel-bottom paper bag machine, M. E. Knight, 29 F. 787.
9,204 (original 194743). Automatic leather measurer, Tapley & Porter, 15 F. 390.
9,247 (original 54938). Stove, G. R. Moore, 12 F. 149.

9,252 (original 89304). Stove, C. Fulton, 12 F. 149.
9,256 See Reissue 10444.
9,260 (original 205589). Coffee roaster, W. E. Vernon, 31 F. 347.
9,276 (original 135256). Harvester, W. F. Randolph, 31 F. 608.
9,289 (original 158967). Friction drum, J. S. Mundy, 20 F. 114; 20 F. 191; 23 F. 591.
9,290 (original 143306). Machine for making metal screws, C. M. Spencer, 26 F. 528.
9,296 (original 167123). Process of extracting gelatine from salted fish skins, J. S. Rogers, 19 F. 426; 30 F. 370.
9,297 (original 150195). Whip socket, A. Searls, F. Cas. 12587a; 12 F. 140; 12 F. 625; 12 F. 874.
9,301 (original 82580). Window sash holder, F. Babcock, 15 F. 160.
9,307 (original 136801). Transom lifter, J. F. Wollensak, 115 U. S. 87; 33 F. 841; 41 F. 53; 151 U. S. 221.
9,309 (original 125098). Lumber drier, E. J. Sumner, 29 F. 320.
9,365 (original 204766). Piston rod packing, M. Schneble, 31 F. 350.
9,368 (original 73684). Coal wagon, J. H. Wood, 17 F. 650.
9,393 (original 222379). Folding bedstead, S. S. Burr, 20 F. 123.
9,408 (original 198610). Coal mining machine, J. W. Harrison, 47 F. 315; 47 F. 652.
9,414 (original 226052). Hot air engine, J. Ericson, 53 F. 380; 58 F. 414.
9,419 (original 215024). Try square, L. S. Starrett, 14 F. 910.
9,422 (original 49290). Lantern, J. H. Miltimore, 10 F. 671; 12 F. 440.
9,439 (original 219090). Coal mining machine, J. W. Harrison, 47 F. 315; 47 F. 652.
9,467 (original 189307). Roller abstrator for watch, B. Frese, 35 F. 141.
9,493 (original 156195) Windmill, W. H. Wheeler, 17 F. 344; 24 F. 650
9,542 (original 157430). Spring for vehicle, J. Tilton, 37 F. 205; 155 U. S. 141.
9,572 (original 110803). Car ventilator, C. P. Tillinghast, 13 F. 388.
9,576 (original 179190). Spring bed bottom, W. B. Hatch, 22 F.434; 22 F. 438.
9,586 (original 202695). Glove sewing machine, C. M. Boland, 26 F. 633.
9,596 (original 131049). Spring bed bottom.J. B. Brolaski, 30 F.613.
9,616 (original 278287). Pantaloons, R. Gibbons, 31 F.816; 141 U.S. 560
9,656 See Reissue 10062.
9,690 (original 229458). Typewriter, J. H. Phipps, 26 F. 447.
9,716 (original 191798). Stylographic pen, A T. Cross, 9 F. 607.
9,729 (original 148497). Running gear for vehicles, Saladee, 20 F.686.
9,731 (original 105833). Horse hay rake, S. R. Nye, 15 F. 114.

9,732—10,093

9,732 (original 73259). Starch mauufacture, J. A. Owens, 10 F. 835.
9,743 (original 130770). Electric apparatus for lighting street lamps, J.P.Tirrell, 21 F.568; 23 F.195; 29 F.455; 139 U.S.481.
9,755 (original 151158). Machine for counting and packing envelopes, A A. Rheutan, 30 F. 623.
9,772 (original 177020). Traveling bag, W. Simon, 20 F. 196.
9,800 (original 212634). Drying apparatus of envelope machine, H. D. & D. W. Swift, 63 F. 982.
9,803 (original 195603). Device for insesting metallic staples, H R. Heyl, 123 U. S. 589.
9,811 (original 222814), Can for transporting cream, J. G. Cherry, 21 F. 246.
9,818 (original 204619). Steam pump, M. Schultz, 27 F. 295.
9,881 (original 71873). Car axle box, J. Harris, 21 F. 47.
9,883 (original 68332). Illuminating roofs, T. Hyatt, F. Cas.9993; 15 F. 751.
9,891 (original 224792). Vehicle dash frame, G. M. Peters, 129 U. S. 541.
9,901 (original 202158). Door bolt, F. Davis, 17 F. 447; 119 U. S. 652.
9,909 (original 88439). Mode of preventing corrosion of metallic caps, L. R. Boyd, 28 F 91.
9,919 (original 138490). Bed bottom, E. S. Field, 20 F. 119.
9,920 (original 138491). Bed bottom, E. S. Field, 20 F. 119.
9,942 (original 230778). Packing stick candy in packages, W. B. Howe, 18 F. 40.
9,957 (original 178916). Method of preserving fish, G. W. Dunbar, 15 F. 747; 119 U. S. 47.
9,959 (original 126285). Grate, R. C. Graves, 20 F. 317.
10,021 (original 234689). Pipe cutter, A. Saunders, 60 F. 610.
10,035 (original 126847). Duplex telegraph, J. B. Stearns, 25 F. 30.
10,047 (original 183188). Fountain hose carriage, I. W. McGaffey, 116 U. S. 661.
10,054 (original 187620). Condensing cylinder for carding engine, J. Greaves, 137 U. S. 259.
10,057 (original 122172). Hominy mill, T. Hudnut, 26 F. 636.
10,062 (original 221310). Clock movement, A. E. Hotchkiss, 18 F. 43; 123 U. S. 88.
10,067 (original 148765). Sewing machine attachment, S.W.Shorey, 24 F. 596.
10,072 (original 112400). Hay knife, G. F. Weymouth, 26 F. 622.
10,083 (original 227350). Method of making paper bags, M. L. Deering 39 F. 390; 58 F. 566; 70 F. 240.
10,087 (original 182973). Shade holder for lamp, C. Votti, 13 F.351; 21 F. 399; 36 F. 582.
10,093 (original 217542). Locomotive spark arrester, C. F. Lochner, 74 F. 636.

10 106 (original 242177). Grain binder, W. R. Baker, 58 F. 773; 69 F. 371.

10,122 (original 231919). Flying target, G. Ligowsky, 35 F. 755.

10,137 (original 146012; 1st Reissue 5868; 2nd Reissue 8424). Method of treating animal fat, H. Mege, 27 F. 78; 135 U. S. 176.

10,139 (original 250954). Roller mill, U. H. Odell, 22 F. 159; 43 F. 528; 156 U. S. 261.

10,155 (original 231104). Corn planter, M. Runstetler, 23 F. 42.

10,175 (original 192386). Vent bung, Pentlarge & Hirsch, 19 F. 817; 20 F. 314; 22 F. 412; 31 F. 76.

10,189 (original 222420). Thermometer, L. Peroni, 19 F. 749; 17 F. 539.

10.239 (original 156858). Ornamenting bracelets etc., E. F. Presbrey, 18 F. 262.

10,252 (original 172092). Saw sharpening machine, W. L. Covel, 27 F. 217.

10,264 (original 148538). Transom lifter, J. F. Wollensak, 22 F. 651; 115 U. S. 96; 33 F. 841; 33 F. 843; 151 U. S. 221.

10,267 (original 78317). Explosive compound, A. Nobel, 19 F. 509.

10,272 (original 240586). Padlock, E. T. Fraim, 25 F. 820; 27 F. 457.

10,275 (original 262505). Process and apparatus for cleaning grain, W L. Teter, 25 F. 555.

10,282 (original 267492) Process of toughening paper pulp articles, H. Carmichael, 83 F. 485; 87 F. 215.

10,284 (original 205572). Apparatus for regulating pressure in a series of fermenting vessels, J. M. Pfandler, 28 F. 428; 35 F 73.

10,288 (original 205718). Spindle bearing for spinning machine, J. Birkenhead, 33 F. 836.

10,347 (original 274940). Straw stacker, L. W. Hasselman, 29 F. 318.

10,348 (original 248206). Gong bell, G. B. Owen, 76 F. 992.

10,359 (original 252646). Manifold copying sales book, J. R. Carter, 68 F. 378; 78 F 926; 79 F. 1007.

10,361 (original 241828). Cabinet lock, H. L. Spiegel, 37 F. 338; 150 U. S 38.

10,363 (original 143421). Children's carriage, H. M. Richardson, 23 F. 252; 23 F. 886; 24 F. 808.

10,368 (original 141473). Bushing for faucet hole. S. R. Thompson, 23 F. 191; 23 F. 195.

10,375 (original 252400) Covering for steam pipes, J. D. Pierce, 89 F. 504; 117 F. 619.

10,376 (original 252400) Covering for steam pipes, J D. Pierco, 89 F. 504; 117 F. 619.

10,417—10,834

10,417 (original 245350). Method of supplying locomotive with coal, J. B. Collin, infringes 99723; 34 F. 899.

10,418 (original 274145). Ship's pump, Russell & Curtis, 26 F. 699; 39 F. 614.

10,419 (original 248094). Fireproof composition, C. C. Gilman, 44 F. 619.

10,420 (original 248094). Fireproof composition, C. C. Gilman, 44 F 618.

10,437 (original 187279; 1st Reissue 8440). Machine for cutting gelatine capsules, F. A. Hubel, 28 F. 132; 35 F. 414.

10,444 (original 154594; 1st Reissue 6387; 2nd Reissue 9256). Drive chain, W. D. Ewart, 31 F. 149.

10,452 (original 96959). Hydrant casing, Race & Matthews, 25 F. 830.

10,469 See Reissue 10546.

10,488 (original 277245). Envelope, J. T. Dunham, 40 F. 668; 154 U. S. 103.

10,497 (original 298678). Steam exhaust head, W. C. Lyman, 75 F. 665.

10.521 (original 264938). Portable grain elevator, R. Dunbar, 75 F. 567; 81 F. 201.

10,546 (original 105338; 1st Reissue 5929; 2nd Reissue 10469). Treating pyroxiline, J. W. & I. S. Hyatt, 27 F. 291.

10,600 (original 171774). Machine for sewing straw braid, M. P. C. Hooper, 52 F. 809; 60 F. 82.

10,625 (original 178261). Registering ship's log, J. & G H. Bliss, 33 F. 39.

10,631 (original 280709). Stem winding watch, D. H. Church, 43 F. 521; 50 F. 542; 50 F. 545; 52 F. 215; 52 F 337; 64 F. 384; 78 F. 124; 81 F. 957.

10,672 (original 104412). Tool for soldering tin can, J. A. Bostwick, 36 F 901; 63 F. 827.

10,681 (original 330976). Cable railway, A. S. Hallidie, 62 F. 288.

10,689 (original 266909) Apparatus for distilling turpentine, J. D. Stanly, 37 F. 348.

10,717 (original 337631). Meat mincer, J. H. Shaw, held not to infringe 271398; 28 F. 185.

10,778 (original 324503). Water meter, J. A. Tilden, does not infringe Reissue 10806; 149 U. S. 48.

10,806 (original 211582). Water meter, L. H. Nash, 149 U. S. 48.

10,807 (original 187279). Machine for cutting gelatine capsules, F. A. Hubel, 35 F. 414.

10,826 (original 291139). Flushing apparatus for water closet, J. E. Boyle, 38 F. 834; 148 U. S. 270; awarded priority over 308358 (C. C., S. D. N. Y.) Boyle v. Hanson, decided June 6, 1888, not reported.

10,834 (original 299327). Wind mill, G. M. Beard, 57 F. 219.

10,867 (original 295302). Target trap, C. F. Stock, 43 F. 922; 47 F. 728; 58 F. 227.

10,872 (original 349430). Plate glass polisher, J. Haslen, 68 F. 479.

10,938 (original 222524). Machine for making rubber belting, J. Murphy, 45 F. 567.

10,941 (original 369195). Car coupling, Lorraine & Aubin, 70 F.783; 77 F. 739; 81 F. 706; 87 F. 885.

10,942 (original 368813). Furnace fuel feeder, Cochran & Lindsay,53 F. 801.

10,945 (original 381305) Electrical conductor, E. Weston, 131 F.90; 136 F. 599.

10,977 (original 385648). Bank account book, W. Thomson,53 F.250.

10,981 (original 335724) Hame tug, J. G. Miller, 130 F. 561.

11,001 (original 357833). Dies for making eye bars, J. F. Kingsley, 55 F. 656

11,009 (original 362568). Garment stay, E C Bowling, 72 F. 277; 78 F. 926.

11,031 (original 407294). System of alternaling current distribution, R. Kennedy, Sept. 24, 1889, void (C. C., N. D. N. Y.) 108 F. 221; (C. C. A. 2nd Cir.) 113 F. 884.

11,047 (original 312599). Secondary battery, J. W. wan, 50 F. 81; 53 F. 793; 63 F. 979.

11,062 (original 393970). Mitering machine, W. R. Fox, 52 F. 205.

11,068 (original 382907). Gas engine, D.S Regan, 47 F 512; 49 F.68.

11,079 (original 408879). Machine for removing water hairs from pelts, A. Hedbavny, May 27, 1890, claims 1 and 2 void, claim 3 void or not infringsd, claim 4 not infringed (C. C., S. D. N. Y.) 95 F. 474.

11,100 (original 376015). Stem winding watch, T. F. Sheridan, 52 F. 215.

11,104 (original 429031) Cigarette machine, R. Hardie, Aug. 19, 1890, held to infringe 184207, 216164, 238640 and 308556 (C. C., S. D. N. Y.) 63 F. 835; held to infringe 184207 and 308556, held to not infringe 216164 and 238640 (C.C. A. 2nd Cir.) 69 F. 335.

11,144 (original 438470). Art of blacking and burnishing boots and shoes, W. W. Crooker, Feb. 10, 1891, void (C. C, D. Mass.) 75 F. 276.

11,153 (original 435995). Pneumatic tire, J.B Dunlop, Mar. 24,1891, valid, infringed (C. C., S D. N. Y.) 53 F. 110, 113; void (C. C. A. 2nd Cir.) 57 F. 631.

11,167 (original 447225). Machine for attaching corner stays to paper boxes, F. H. Beach, May 26, 1891, valid, infringed (C. C. N. D. N. Y.) 63 F. 597; (C. C. A. 2nd Cir.) 71 F. 420; infringed (C. C., N.D. N. Y.) 75 F. 840; 78 F. 923; claims 1, 2 and 3 valid, infringed, claim 6 valid, not infringed (C. C., D. Mass.) 82 F. 916; valid, infringed (C. C. A. 1st Cir.) 92 F. 146; (Sup. Ct.) 180 U. S. 383.

11,216—11,523

11,216 (original 448793). Bicycle tire, W. E. Bartlett, Dec. 29, 1891, void or not infringed (C C., S. D. N. Y.) 85 F. 451.

11,250 (original 433637). Electro-dynamometer, E. Weston, June 28, 1892, valid, infringed (C. C., S. D. N. Y) 119 F. 181; void (C. C. A. 2nd Cir.) 134 F. 574.

11,252 (original 428907). Apparatus for sifting and sorting flour, C. Haggenmacher, June 28, 1892, valid, infringed (C.C., E. D. Pa.) 88 F. 486.

11,260 (original 456117). Thill coupling, W. H. Hannan, Aug. 16, 1892. void (C. C., N. D. N. Y.) 138 F. 911; (C C. A. 2nd Cir.) 144 F. 90.

11,282 (original 445235). Wood pulp digester, G. F. Russell, Nov. 15, 1892, void (C. C., D. Me.) 70 F. 986; valid, infringed (C. C. A. 1st Cir.) 80 F. 395; (C. C., D N H.) 103 F. 975.

11,311 (original 442461), Centrifugal milk separator, Sharples & Sharples, Feb. 28, 1893, valid, infringed (C. C., D. Vt.) 75 F. 595; (C. C. A. 2nd Cir) 81 F. 179.

11,313 (original 452754) Soda water apparatus, J. B. Heron, Mar. 14, 1893, void (C. C., E. D. Wis.) 75 F. 573; (C. C. A. 7th Cir) 85 F. 968.

11,324 (original 465615). Ventilator and refrigerator car, E.T.Earl, Apr. 18, 1893, valid, infringed (C. C. A. 9th Cir.) 82 F. 737; (C. C A. 9th Cir.) 92 F. 155.

11,371 (original 477917). Drainer for saloon faucets, etc., H.Strater, Oct. 3, 1893, void (C. C., D. Mass.) 69 F. 619.

11,383 (original 462954). Lamp stove, J. F. Myers, Nov. 7, 1893, valid, infringed (C. C. A. 9th Cir.) 81 F. 854

11,395 (original 459706). Electric snap switch, G. W. Hart, Dec. 12. 1893, not infringed (C. C., D. Mass.) 82 F. 911; valid, infringed (C. C A 1st Cir.) 92 F. 657.

11,411 (original 478461) Hair clipper, J. K. Priest, Apr. 10, 1894, void (C. C., D. Mass) 81 F. 615.

11,439 (original 437018). J. J. Pfenninger, Sept. 4, 1894, void (C.C., E. D. Mo.) 99 F. 440.

11,443 (original 469302). Pneumatic tester for cans, W. B. Page, 67 F. 142.

11,462 (original 527382). Cooking stove, S. Boal, Jan. 8, 1895, void C. C. A. 6th Cir.) 84 F. 182.

11,478 (original 259235). Electric light fixture, L. Stieringer, 72 F. 660; 86 F. 124; 87 F. 869; 91 F. 665; 93 F. 684; 95 F. 823; 97 F. 969; 103 F. 494

11,508 (original 527633). Spring seat or cushion, W. Vogler, Oct. 15, 1895, valid, infringed (C. C., D. Mass.) 107 F. 140.

11,514 (original 527634) Metallic pillow or cushion, W. Vogler, Nov. 19, 1895, valid, infringed (C. C , D. Mass.) 107 F. 140.

11,523 (original 517271). Gas producer, E. J. Duff, Jan. 28, 1896, valid, infringed (C. C., W. D. Pa.) 99 F. 562.

11,544 (original 294697). Combined gas and electric light fixture, L Stieringer, 103 F 494.

11,592 (original 518305). Hydrocarbon burner, A. J. Blackford, Mar. 2, 1897, not infringed (C. C. A. 6th Cir.) 119 F. 157.

11,601 (original 463629). Hydrocarbon burner, W. R. Jeavons, May 18, 1897, void (C. C. A. 6th Cir.) 119 F. 157.

11,607 (original 361934). Blue flame oil stove, O. Ewert, 119 F. 157.

11,657 (original 559670). Hydrocarbon burner, T. J. Brough, Mar. 22, 1898, claims 1 and 2 void (C. C., S. D. Ohio, W. D.) 103 F. 973.

11,664 (original 560819) Ironing machine for edges of collars and cuffs, F. E. Fay, May 17, 1898, valid, infringed (C. C., W. D. N. Y.) 120 F. 506; not infringed (C. C. A. 2nd Cir.) 127 F. 325.

11,685 (original 540072). Bottle stopper, W. Painter, July 26, 1898, not infringed (C. C., D Md.) 100 F. 849; valid, infringed (C. C. A. 4th Cir.) 108 F. 845; (C. C., D. Md.) 123 F. 666; not anticipated by Brit. Pat. 12247 of 1848 (C.C. A. 4th Cir.) 131 F. 244.

11,696 (original 563664). Dental spittoon, F. Hurlbut, Sept 27, 1898, valid, infringed (C. C., N. D. Ill., N. D.) 100 F. 855; (C. C. A. 7th Cir.) 108 F 659.

11,727 (original 401770). Laundry dampening machine, Wendell & Wiles, Mar. 21, 1899, not infringed (C. C., N. D. N. Y.) 112 F. 437.

11,730 (original 400682). Lubricating device for steam engine, A.L. Ide, Apr. 4, 1899, claims 3, 4 and 5 void (C. C. A. 8th Cir.) 115 F. 137.

11,738 (original 577516). Computing scale, F. E. Mellinger, May 2, 1899, claims 1 and 4 void, claims 2, 9, 10 and 11 not infringed (C. C. A. 6th Cir.) 126 F. 639.

11,836 (original 351589) System of electrical distribution, Gaulard & Gibbs, 115 F. 810.

11,872 (original 495443). Trolley for electric railway, C. J. Van Depoele, Nov. 13, 1900, void (C. C., N. D. N. Y.) 124 F. 495; valid, infringed (C. C. A. 2nd Cir.) 135 F. 759; preliminary injunction denied, infringement doubted (C. C., D. N. J.) 140 F. 554; preliminary injunction granted (C. C., W. D. N. Y.) 141 F. 128; valid and infringed (C. C.; N D. O., E. D.) 143 F. 903.

11,913 (original 586193). Wireless telegraph apparatus, G. Marconi, June 4, 1901, claim 1 void, claims 3 and 5 infringed, claims 8, 10 and 24 not infringed (C. C., S. D. N. Y.) 138 F. 657.

11,918 (original 428169). Electric car motor controller, W. H. Knight, July 2, 1901, not infringed (C. C., W. D. Pa.) 144 F. 434.

11,919—12,219

11,919 (original 668381). Support for Morris chair back, J. Luppino, July 2, 1901, held not to infringe 667162 and 678219 (C. C., E. D. Pa.) 131 F. 755.

11,980 (original 642059) Machine for ornamenting picture frames, F. E. Adams, Apr. 8, 1902, claims 11 to 18 void (C. C., N. D. Ill., N. D.) 128 F. 48; (C. C. A. 7th Cir.) 138 F. 58.

11,992 (original 664890). Convertible car, J. O'Leary, May 20, 1902, valid, infringed (C. C., N. D. N. Y) 139 F. 330; claims 4, 10, 13, 14 infringed by 709073, claims 1, 2, 6, 7, 8, 9 invalid or not infringed (C. C. A. 2nd Cir.) 144 F. 399.

12,037 (original 589168). Kinetographic camera, T. A. Edison, Sept. 30, 1902, not infringed, claim 4 void (C. C., S. D. N.Y.) 144 F. 121.

12,058 (original 679650). Tension for whip braiding machine, J. A. Turner, Nov. 25, 1902, void (C. C., D. Mass.) 134 F. 398.

12,085 (original 638669). Clutch mechanism, A. E. Norris, Feb. 24, 1903, void as reissued (C. C., S. D. N. Y.) 140 F. 716.

12,115 (original 727331). Receiver for wireless telegraph, R. A. Fessenden, May 26, 1903, valid, claims 11, 23 and 25 infringed (C. C., S. D. N. Y.) 140 F. 449; claims 11, 23 and 25 infringed (C. C., S. D. N. Y.) 145 F. 354.

12,156 (original 722367). Telephone system, Lattig & Goodrum, Sept. 8, 1903, 25 App. D. C. 591.

12,203 (original 651276). Hub for vehicle wheel, E. Sendelbach, Mar. 8, 1904, valid under R. S. § 4915 (C. C., D. Ind. July 12, 1905 and C. C. A 7th Cir., Apr 10, 1906) Gillette v. Sendelbach et al. not reported.

12,219 (original 695298). Rubber tread for shoes, R. E. Foster, valid and infringed (C. C., D. Mass.); Foster Rubber Co. v. Regal Shoe Co., consent decree Dec. 19, 1905, not reported.

TABLE III.

Chronological List of Adjudicated Design Patents.

139	Buttons, D. A. Booth, F. Cas. 1646.
1,149	Sewing mashine frames, S. B. Ellithorp, F. Cas. 5383.
1,439	Handles of table spoons and forks, Gorham, Thurber & Dexter, F Cas. 5627; 14 Wall. 511.
1,834	Reel, E C. Wooster, F. Cas. 18036.
4,637	Sieve, R. J Mann, F. Cas. 72; F. Cas. 3693.
4,802	Printed material for gored skirts, W. H. Walton, 18 F. 824.
5,006	Harness trimming, C. M. Theberath, 3 F. 151; 15 F. 246.
6,822	Carpet, C. A. Righter, 118 U. S. 10
7,456	Stove, Perry, Dickey & Williams, F. Cas. 11012.
10,844	Saddle, R. E. Whitman, 38 F. 414; 148 U. S. 674.
11,208	Rubber mat, G. Woffenden, 48 F. 556; 53 F. 810; 56 F. 264; 137 U. S. 445.
11,947	Curtain and loop, E. S. Yergason, 26 F. 618.
12,485	Watch case, H. Untermeyer, 20 F 503.
13,295	Vegetable dish, J. Slater, 23 F. 895; 34 F. 536.
13,405	Chair-back, H. H. Payne, 46 F. 189; 50 F. 776.
13,620	Corset, F. Welton, 34 F. 39.
14,239	Knitted overshirt, S. Conde, 39 F. 789.
14,356	Pendant, B. Dryfus, 25 F. 481.
14,373	Lamp chimney, H. Dietrich, 54 F. 167; 54 F. 169; 54 F. 171; 54 F. 173; 64 F. 118.
14,961	Photograph album leaf, S. Meers, 31 F. 153.
15,049	Jewelry pin, T. W. Foster, 23 F. 400.
15,050	Jewelry pin, T. W. Foster, 23 F. 400
15,121	Watch case, H. Untermeyer, 37 F. 342; 50 F. 77; 58 F. 205.
16,031	Hay fork pulley, E. C. Stearns, 46 F. 193.
16,039	Sewing machine case, N. A. Hull, 41 F. 778.
16,040	Sewing machine case, N. A Hull, 41 F. 778; 41 F. 784.
16,114	Harness Tompkins & Goodsell, 45 F. 582.
16,312	Easel, E. B. Crocker, 29 F. 456.
16,379	Textile fabric, G. Streat, 35 F. 426; 53 F. 358.
16,664	Cooking stove, J. F. Martens, 38 F. 582.
16,887	Rosette, A. R. Fuller, 82 F. 813.
16,933	Hood, I. Hermann, 29 F. 92.
17,090	Lamp burner, L. Henkle, Feb. 8, 1887, 36 F. 691
17,235	Metallic siding for buildings, L. L. Sagendorph, 95 F. 478.

17,243—25,423

17,243 Bottle, D. C. Riplev, 49 F. 927.
17,270 Radiator, L. H. Prentice, 36 F. 555; 44 F. 280; 62 F. 465.
18,190 Stove, Keep & Wipfler, 81 F. 376.
18,293 Window guard, J. Pirkl, 42 F. 410.
18,589 Braid, V. Schuck, 44 F. 356.
18,703 Rug, W. T. Smith, 55 F. 481; 58 F. 580.
18,996 Rug, J. Stroheim, 42 F. 323; 152 U. S. 244.
19,872 Mantel, W. Anderson, 46 F. 777; 50 F. 775; 55 F. 396.
19,873 Mantel, W. Anderson, 55 F. 398; 58 F. 398.
19,876 Mantel, W. Anderson, 46 F. 760; 47 F. 67; 55 F. 405.
19,877 Mantel, W. Anderson, 55 F. 407; 58 F. 401.
20,156 Fountain pen case, C W. Boman, 53 F, 389.
20,157 Pen tip, C. W. Boman, 53 F. 389.
20,158 Pen case, C. W. Boman, 53 F. 389.
20,347 Album case, W. Bergner, 52 F. 818.
20,660 Case for weighing machines, H. E. Patterson, 111 F. 401.
20,670 Carriage lamp, H F. Stahmer, 61 F. 93.
20,714 Casket handle ear, M. Bremer, 71 F. 307.
20,748 Badge, G. C. Van Roden, 71 F. 970; 73 F. 488.
21,042 Railway car body, J Hammond, 70 F. 716.
21,155 Mantel, E. T. Germain, infringes 19873, 55 F. 398; does not infringe design 19873, 58 F. 398.
21,416 Frame for electric machines, A. Schmid, Mar. 22, 1892, void (C. C. A. 6th Cir.) 97 F. 99.
22,294 Heel plate, G J. Davison, 71 F. 161.
22.422 Lamp fount holder, J. C. Miller, 73 F. 212.
22,856 Monument, W H. Perry, 111 F 1002.
22,911 Lamp stove, J. F. Myers, 81 F. 854; 102 F. 250.
22,997 Table leg, L. Welker, Jan. 2, 1894, void (C. C., W. D. Pa.) 73 F. 299.
23,318 Slab for table tops, J. C Miller, 71 F. 518.
23,362 Carpet, G. Marchetti, 83 F. 488.
23,654 Mirror frame, C. F. Mosman, 96 F. 340; 105 F. 967; 118 F. 339.
23,671 Lamp fount holder, Miller & Schul z, 73 F. 212.
23,672 Base for lamp, J. C. Miller, 73 F. 212; 103 F. 634.
23,673 Lamp base, J. C Miller, 73 F. 212; 103 F. 634.
23,674 Lamp base, J. C. Miller, 103 F. 634.
23.699 Razor handle, F R. & O Kampfer, 105 F. 622; 109 F. 1064.
23,780 Stove, S. Boal, 84 F. 182.
23,886 Trimming for ladies' underwear, F. A. Byram, 87 F.559; 100 F. 963.
24,021 Carpet, J. B. Neil, 79 F. 788; 84 F. 1019.
24,091 Cuff button, J. A. Flomerfelt, 88 F. 696.
25,327 Scale frame, E. N. Gilfilan, 102 F. 916.
25,423 Bicycle saddle, H. & F. Mesinger, 94 F. 672; 94 F. 674.

25,435 Bottle stopper, K. Hutter, Apr. 28, 1896, valid, infringed (C. C , D. N. J.) 114 F. 655; (C. C., S. D. N. Y.) 119 F.190; validity questioned, not infringed (C. C. A. 2nd Cir.) 128 F. 283.

25,907 Carpet, F. M. Parker, 94 F. 518; 97 F. 791.

25,927 Metal basket, L. Bennett, Aug. 11, 1896, void (C. C. A. 2nd Cir.) 136 F. 193.

26,245 Corner block for mattress frames, W. H Taber, anticipates 615073, 105 F. 962.

26,533 Cap, J. Frank, 84 F 170.

26,587 Horseshoe calk, A. H. Rowe, Feb. 2, 1897, not invalid (C.C., D. Conn.) 87 F. 868; void (C. C., D. Conn.) 103 F. 873; (C. C. A. 2nd Cir.) 112 F. 61.

26,623 Chair, S Kline, Feb. 9, 1897, valid, not infringed (C C , S. D. N. Y.) 138 F. 90.

26,684 Card playing slot machine, B. J. Wertheimer, 80 F. 902.

27,032 Safety razor casing, Kampfe & Kampfe, May 11, 1897, void (C. C., S. D. N. Y.) 105 F. 622, 624.

27,115 Sarcophagus monument, W. H. Young, May 25, 1897, valid and infringed (C. C., N. D. N. Y.); Young v. Daley, decree entered Nov. 10, 1902 not reported; valid and infringed (C. C. A. 2nd Cir.); Young v. Daley, mandate Mar. 30, 1903 not reported.

27,272 Furniture support, F. W. Hill, 91 F. 163.

27,514 Paper clip or fastener, W. R. Macintosh, Aug 10, 1897, void (C C., S. D. N. Y.) 121 F. 560; not infringed (C. C. A. 2nd Cir.) 130 F. 150.

27,865 Glove fastener, W. S. Richardson, 90 F 664.

28,142 Box fastener, S. C. Cary, Jan. 11, 1898, void (C. C., S.D. N. Y.) 90 F. 725; (C. C. A. 2nd Cir.) 98 F. 617.

28,435 Bicycle saddle, B. F. Wheeler, 122 F. 645.

28,571 Washer for thill couplings, C. C. Bradley, May 10, 1898, valid, infringed (C. C., N D. N. Y.) 122 F. 871; void (C. C. A. 2nd Cir.) 126 F. 945.

29,350 Skirt binding, H. Feder, Sept. 13, 1898, void (C. C., S. D.N. Y.) 105 F. 628; void or not infringed (C C. A. 2nd Cir.) 118 F 1015.

29,485 Eyeglass case, J. G. Koenen, Oct. 18, 1898, void (C. C. A.1st Cir.) 101 F. 466.

29.571 Vessel, F. W. Smith, 92 F. 1003.

29,584 Case or shell for water heater, A. Buerkle, Nov. 1, 1898, not infringed (C. C., D. Pa.) 105 F. 779.

29,793 Horseshoe calk, J. R. Williams Dec. 13, 1898, void or not infringed (C. C., M. D. Pa) 136 F. 210; void (C C. A. 3rd Cir.) 145 F. 928.

29,914 Seam welting strip, F. W. Merrick, Dec. 27, 1898, void (C. C. A. 1st Cir.) 108 F. 398.

29,939—36,905

29,939 Portable electric lamp body, G. F. Hitzelberger, Jan.3, 1899, valid, infringed (C. C., S. D. N. Y.); 98 F.895; void (C. C., S. D. N Y.) 108 F.957; (C.C.A. 2nd Cir.) 113 F. 877.

30,023 Syringe, E. T. Pearl, 114 F. 946.

30,147 Lamp fixture, J. F. Williams, Feb. 7, 1899, not infringed (C. C. A. 7th Cir.) 97 F. 87.

30,518 Belt fastener plate, A. L. Eaton, Apr. 11, 1899, void (C. C., S. D. N. Y.) 115 F. 635.

30,519 Belt fastener plate, A. L. Eaton, Apr 11, 1899, void (C. C., S. D N. Y.) 115 F. 635.

30,520 Belt fastener plate, A. L. Eaton, Apr. 11, 1899, void (C. C., S. D. N. Y.) 115 F. 635.

30,627 Sign plate, G. A. Kruttschnitt, 118 F. 851.

31,675 Ribbon spool for typewriter, E. J. Manning, Oct. 17, 1899, void (C C., S. D. N. Y.) 144 F. 405.

31,745 Street lamp, Shaw & Sanderson, 117 F. 324.

32,685 Lamp shade or reflector, O. A. Mygatt, May 22, 1900, valid, infringed (C. C., S. D. N. Y.) 138 F. 88.

32,747 Thill coupling, C. C. Bradley, May 29, 1900, valid, infringed (C. C., N. D N. Y.) 122 F. 871; void (C.C. A. 2nd Cir.) 126 F. 945.

33,142 Bell, F. A. Scranton, Aug. 28, 1900, void, not infringed (C. C., D. Conn.) 114 F. 362.

33,633 Casing for disinfecting apparatus, E. Taussig, Dec. 4, 1900, valid and infringed (C. C., S. D. N. Y.) 146 F. 388.

33,961 End frame for bedsteads, D. Frank, Jan. 22, 1901, valid, infringed (C. C., S. D. N. Y.) 121 F. 126.

33,962 End frame for bedsteads, D. Frank, Jan. 22, 1901, valid, infringed (C. C , S. D. N. Y.) 121 F. 126.

33,963 End frame for bedsteads, D. Frank, Jan. 22, 1901, valid, infringed (C. C., S. D. N. Y.) 121 F 126.

33,964 Bedstead corner post, D. Frank, Jan. 22, 1901, valid, infringed (C. C , S. D. N. Y.) 121 F. 126.

34,357 Belt, I. Lewenthal, 121 F. 128.

35,027 Bottle, A. F. Jammes, Sept. 3, 1901, valid, infringed (C. C., S. D N. Y.) 132 F. 827.

35,043 Rolling chair, H. E. Weisgerber, Sept. 3, 1901, not infringed (C. C., D. N. J.) 131 F. 477.

35,481 Cluster gas lamp, A. H. Humphrey, Dec. 24. 1901, valid, infringed (C. C., S. D. N. Y.) 129 F. 137.

36,905 Font of type, I. Kimball, May 3. 1904, void (C. C., S. D. N. Y.) 140 F. 715

TABLE IV.

Alphabetical Index to Adjudicated Design Patents.

[The numerical references are to the patents listed under Table III].

Album case, 20347.
Badge, 20748.
Basket, metal, 25927.
Bedstead corner post, 33964.
Bedstead, end frame for, 33961, 33962, 33963.
Bell, 33142.
Belt, 34357.
Belt fastener plate, 30518, 30519, 30520.
Bicycle saddle, 25423, 28435.
Bottle, 17243, 35027.
Bottle stopper, 25435.
Box fastener, 28142.
Braid, 18589.
Buttons, 139.
Cap, 26533.
Carpet, 6822, 23362, 24021, 25907, 71 F. 515.
Car body, railway, 21042.
Casing for disinfecting apparatus, 33633.
Casket handle ear, 20714.
Chair, 26623.
Chair back, 13405.
Chair, rolling, 35043.
Corset, 13620.
Cuff button, 24091.
Curtain and loop, 11947, 25 F. 905.
Dish, vegetable, 13295.
Easel, 16312.
Electric machines, frame for, 21416.
Eyeglass case, 29485.
Fabric, textile, 16379.
Fork, table, 44 F. 62.
Fountain pen case, 20156.
Furniture support, 27272.
Gas lamp, cluster, 35481.

GLOVE—SKIRT

Glove fastener, 27865.
Harness, 16114.
Harness trimming, 5006.
Heel plate, 22294.
Hood, 16933.
Horseshoe calk, 26587, 29793.
Jewelry pin, 15049, 15050.
Lamp base, 23672, 23673, 23674.
Lamp body, portable electric, 29939.
Lamp burner, 17090.
Lamp, carriage, 20670.
Lamp chimney, 14373.
Lamp fixture, 30147.
Lamp fount holder, 22422, 23671.
Lamp shade or reflector, 32685.
Lamp stove, 22911.
Lamp, street, 31745.
Mantel, 19872, 19873, 19876, 19877, 21155.
Mat, rubber, 11208, 30 F. 785.
Mattress frames, corner block for, 26245.
Mirror frame, 23654.
Monument, 22856.
Newel post, 22 F. 444.
Oil cloth, 1 Blatch. 135; 1 Blatch. 205; 2 Blatch. 29.
Paper clip or fastener, 27514.
Pen case, 20158.
Pen tip, 20157.
Pendant, 14356.
Photograph album leaf, 14961.
Pulley, hay fork, 16031.
Radiator, 17270.
Razor casing, safety, 27032.
Razor handle, 23699.
Reel, 1834.
Rosette, 16887.
Rug, 18703, 18996.
Saddle, 10844.
Sarcophagus monument, 27115.
Scale frame, 25327.
Seam welting strip, 29914.
Sewing machine case, 16039, 16040.
Sewing machine frame, 1149.
Shirt, knitted over, 14239.
Siding for buildings, metallic, 17235.
Sieve, 4637.
Sign plate, 30627.
Skirt binding, 29350.

Skirts, printed material for gored, 4802.
Slot machine, card playing, 26684.
Spool for typewriter ribbon, 31675.
Spoon, 44 F. 62.
Spoons and forks, handles of table, 1439.
Stove, 7456, 18190, 23780.
Stove, cooking, 16664
Syringe, 30023.
Table leg, 22997.
Table tops, slab for, 23318.
Thill coupling, 32747.
Thill coupling, washer for, 28571.
Type, font of, 36905.
Typewriter, ribbon spool for, 31675.
Underwear, trimming for ladies', 23886.
Vessel, 29571.
Watch case, 12485, 15121.
Water heater, case or shell for, 29584.
Weighing machines, case for, 20660.
Window guard, 18293.

TABLE V.

Alphabetical Index of Adjudicated Patents for Inventions.

[The numerical references are to the patents listed under Tables I and II. When impracticable to identify patents by dates or numbers, the references are to the volumes of reports where the adjudications may be found. This index is intended to lighten the labor of searching for adjudications in any particular art, but a word of caution may be necessary against taking its entries too narrowly. For example, in looking up Automatic Fire Extinguishers, it would be safest also to look up references under Fire Extinguishers, as well as under Fire Extinguishers, Automatic, for it is quite possible that the data from which this list was prepared as well as the patents by which it was checked may have referred to some Automatic Extinguishers without specifically designating them as such. Another uncertainty of nomenclature that should be borne in mind by the user of this table is the indiscriminate application of different terms to the same device, e. g., "stone-breaker" and "ore-crusher," or "plow" and "cultivator." Again, a specific element is sometimes referred to under the name of the system of which it is a part, e. g., an engineer's air brake valve may be indexed as "Air brake," or an incandescent lamp socket as "Incandescent lamp"].

Abdominal pad and hose supporter, 638540.
Account—see Sales.
Account book, bank, 385648. Reissue 10977. See also Blank book.
Accumulator—see Storage battery.
Acetylene gas burner, 617942, 634838, 23 App. D. C. 79.
Acetylene gas burner, tip for, 589342.
Acid, pulverulent, Reissue 2979.
Adding machine, 371496.
Advertising cabinet, 486113.
Advertising rack for street cars, 380696.
Aerial ballet, 78 F. 366.
Air—see Pump.
Air brake, 162465, 172064, 222803, 360070, 376837, 382032, 393784, 59 F. 581, 63 F. 962. See also Brake.
Air brake hose, 348289.
Air brake, quick action valve for, 538001.
Air brake triple valve, automatic, 580846.
Air brake, valve for, 481134, 481135, 481136.
Air brush, 555669.

Air chamber for hydraulic elevator, 183055.
Air engine, see Hot.
Air pump, see Lamp bulb.
Alarm, see Fire.
Alarm bell for street cars, 517395.
Alarm, burglar, electric, 103383. Reissue 4297.
Alarm, fire, electric telegraph, 8891.
Album, 432411.
Album, clasp, 42 F. 454.
Alizarine, artificial, Reissue 4321.
Alkali, Reissues 2569, 2570, 2571..
Alloy, bronze, 201536.
Alternating arc lamp circuits, regulating device for, 684340.
Alternating current distribution, 413293.
Alternating current distribution, system of, Reissue 11031.
Alternating current, method of regulating, 684165.
Alternating current motor, 363186, 399801, 511560, 555190.
Alternating current motor, method of operating, 511559, 511915.
Alternating current, transformer, 366362.
Alumina, sulphate of, manufacture, 239089.
Aluminum ores, process of reducing, 464933.
Aluminum, process of making wrought iron castings by adding, 333373.
Aluminum, process of reducing by electrolysis, 400766.
Aluminum, process of separating, 468148.
Amalgamating barrels, 43462.
Amalgamator, 40874, 52015.
Ammoniacal detergent compound, 267455, 382322, 382323.
Angle irons, bending, 283186.
Anglers' fly book, 333384.
Aniline black resist, 499689.
Animal—see Toy.
Animal fat, treating, Reissue 5868.
Annealing box, 149875.
Annealing furnace, glass, 258156.
Annunciator and spring-jack, combined, 521461.
Annunciator drop, electric, 477616.
Annunciator, electric, for elevators, 148447, 172993.
Anvil, 15687.
Anvil, cartridge, 220472.
Apple parer, corer and slicer, 140315.
Apple-paring machine, 10078. See also Fruit.
Arc extinguisher, magnetic, 283167.
Arc lamp, 147827, 219208, 405440, 418758, 420109, 430722, 502536. 540800. See also Lamp.
Arc lamp, circuit controller for, 502535.
Arc lamp circuit, regulating device for alternating, 684340.

Arches, concrete, 98571.
Armature core, 508637.
Armlets, method of making, 411416.
Armor for ship, 38206.
Armor plate, process for hardening, 460262.
Armored insulated electric conduit, 564174.
Aromatic ketone, 556943.
Arrester—see Spark.
Arrester, strong current, 544368.
Artesian wells, method of driving, Reissue 4372.
Artificial denture, 277491, 277493, 30 F. 775. See also Denture.
Artificial flower, 264308.
Artificial gums, 43009, Reissue 1904.
Artificial leg suspender, 644464.
Artificial teeth, method of permanently fixing to the mouth, 238940.
Asbestos—see Packing and Mineral Wool.
Asbestos insulation, 534785, 709001, 740131.
Asphalt—see Tank.
Asphalt, bricks of, machine to make, 289397.
Asphalt pavement, apparatus for repairing, 542349, 560599.
Asphalt pavement, method of repairing, 501537,
Asphalt paving compound, 342852.
Asphaltum, artificial, 564975.
Asphaltum, process of using for paving, 319125.
Atomizer, 386121, 447064.
Atomizer bulb, 282090.
Auger, Feb. 12, 1814.
Auger handle, Reissue 4187.
Auger machine, 56869, Reissue 5624.
Autographic printing, method of, 180857.
Automobile, 143 F. 551.
Automobile boiler flue, 658114.
Automobile, gas, 549160.
Axes, manufacture of, 500084.
Axle—see Die, Lubricator, Wagon.
Axle-bearing, 280421, 249278.
Axle bearing for locomotive, 22439.
Axle box—see Lid.
Axle box and car wheel, 330372.
Axle box, car, Reissues 3243, 9881; F. Cas. 8343; F. Cas. 8344; F. Cas. 8345.
Axle box, dust shield for car, 418439.
Axle box lid, car, 423795, 521231.
Axle box manufacture, 1252.
Axle, cultivator, 187899.
Axles for carriages, 200214, 216276, 233932, Reissue 8719.
Axle lubricator, 242141.

Axles, sand box for carriage, Reissue 6350.
Axle, self lubricating, Reissue 6129.
Axle skein for vehicles, 216615.
Axle tree, July 20, 1831.
Axle turning machine, 127211.
Baby jumper, 79534, 138209.
Bag—see Mail, Paper, Traveling.
Bag filling machine, folding mechanism for, 578133.
Bag tie or grain band, 135899.
Bag, wire, 135899.
Bagasse furnace, 18874.
Bagatelle board, 603738.
Baggage check holder, 268591.
Bail ear for pails, 147343, 344667.
Bail for kettle, 338506.
Bake—see Oven.
Baker's oven, 355568.
Baking biscuit cups for ice cream, apparatus for, 701776.
Baking powder, 206930, 474811.
Balance, F. Cas. 16898. See also Sash.
Bale tie 19490, 31252, 59144, 159463, 466563, Reissues 4896, 5333, 7388.
Bale tie, adjustable, 282991, 372375.
Baling—see Cotton, Hay, Packing.
Baling cotton, method of, 441022.
Baling press, 60196, 126394, 170997, 170998, 224281, 234549, 341559, 415029, 456239.
Baling press for cotton, 510388.
Baling press, hay, 232400, 358898, 363012, 365211, 382144, 386360, 394623, 495944.
Ball—see Leather.
Ball bearing, 621219.
Ball cover, base, Reissue 7046.
Ball, golf, 622834.
Ball, toy, 213642.
Ballasting vessels, 126938, 232435.
Balls of yarn, manufacture of, 177194.
Band—see Saw mill, Spindle.
Band, cigar, 715512
Band cutter and feeder for thrashing machines, 556326.
Band fastening, 391340.
Band saw mill, 442645, 468303.
Band shell for wheel hubs, 480093.
Banjo, 136491, 205604, 249321, 253849, 274915.
Bank account book, 385648, Reissue 10977.
Bank note printing, Apr. 28, 1815.
Bank for coins, pocket savings, 450216.

Bank, savings, 725858.
Bank, toy, 373223.
Bank, toy registering savings, 379534.
Bar—see Window sash.
Bar, eye, dies for making, Reissue 11001.
Bar, grate, 15 F. 344.
Barbed wire—see Wire.
Barbed wire cable, 233116.
Barbed wire fence, 153965, 157124, 192225, Reissues 6902, 6913, 6979, 7035, 7136; 18 F. 172.
Barbed wire machine, 365723.
Barber's chair, Reissue 7320.
Barbing fence wire, 214706, 253781, Reissue 7566.
Barbing fence wire, machine for, Reissue 7566.
Barge, coupling for, 111564.
Bark—see Tan.
Barrel—see Paper pulp, Trussing machine.
Barrel, amalgamating, 43462.
Barrel filter for metal solutions, 587874.
Barrel head lining, 136763.
Barrel head, machine for printing, 557582.
Barrel head, paper pulp, 206396.
Barrel heading machine, 437785.
Barrel hooping machine, 439142, 454803.
Barrel making mechanism, 339064.
Barrel, mode of pitching, 42580.
Barrel stand, 396372.
Barrel, thimble and bushing for, 468144.
Barrel washer, 400346, 605138.
Barrel, with glue, process of lining oil, Reissue 5785.
Base ball cover, Reissue 7046.
Base ball mask, 200358.
Base board and wainscoting, 346899.
Basin—see Water closet.
Basin, enameled, 285645.
Basin supply connection, 449880.
Basin, wash, overflow for, 379973.
Basket, channel strips for, machine for forming, 482484.
Basket cover fastening, 221203.
Basket, fruit, 313910.
Basket, fruit, handle, 121054.
Bath, electric, 38389.
Bath seat, 736032.
Bath, shower, 5993.
Bath supply connection, 449880.
Bath tub, 189559, 458995.
Bath tub, copper lined, 80441.

Bath water heater, 555033.
Bathing shoe and stocking combined, 347442.
Battery—see Galvanic.
Battery, electric, 20 F. 724.
Battery, galvanic, 500284, 520429.
Beam—see Brake.
Bean harvester, 364603
Bearing—see Journal, Roller, Spindle, Spinning, Trunnion.
Bearing, ball, 621219.
Bearing for electric motor, lubricated, 622247.
Bearing for sewing machine band wheel, 224710.
Bearing, journal, 417340.
Bearing, non-metallic, 475929.
Beater, egg, 254540, Reissues 1062, 6542.
Bed—see Spring.
Bed bottom, 33685, Reissues 5312, 6338, 9919, 9920. See also Mattress.
Bed bottom or hammock, 271510
Bed bottom spring, 93096, 99765, 125250, 142377, 191244, 193567, 241916, 269242, 303393. Reissues 9576, 9596.
Bed bottom, machine for weaving coiled wire fabric for, 348150.
Bed bottom, woven wire, 241321, 403143.
Bed couch, 667916.
Bed, folding, 311623, 364875, 397766, 441569, 464524.
Bed frame, spring, 366566.
Bed lounge, folding, 394957.
Bed or seat bottom, spring, 745345.
Bed plate for steam engine, 269329.
Bed spring, 405821.
Bedstead, July 14, 1824, 797, 821, 58437, 97375, 204321, 230105, Reissue 9393.
Bedstead, caster for, 821.
Bedstead, folding, 409606.
Bedstead, sofa, 186608.
Bedstead, wardrobe, 204321, 270327;
Beer, apparatus for filling kegs with, 331251.
Beer, apparatus for racking, 537939.
Beer cask—see Relief valve.
Beer cooler, 32845, F. Cas. 14266.
Beer cooler and drawer, 248646.
Beer, dispensing apparatus for, 710291.
Beer, filling kegs with, 333081.
Beer filtering process, 378379.
Beer manufacture. 215679.
Beer, method of filling kegs with, 331252.
Beer pumping system, 673922.
Beer, racking, 647298.
Beer, treatment of, Reissue 9129.

BEER—BINDING

Beer vessels, relief valve for, 318040.
Bell, Dec. 19, 1808, 456062.
Bell, bicycle, 471982, 491012, 507804, 608146, 622159, 118 F. 168.
Bell, door, 471983.
Bell for street cars, alarm, 517395.
Bell, gong, Reissue 10348.
Bell hammer, rotary, 507805.
Bell ringer, 127933.
Bell ringer, steam, 154394.
Bell, toy, Reissue 6644.
Bell, tubular, 485542, 568816.
Bellows, Reissue 484.
Belt, 130 F. 778
Belt, cartridge, 756177, 756178.
Belt, electric, 45 F. 639.
Belt fastener, 282258.
Belt idler pulley, conveying, 571604.
Belt pulley, 238702, 248598.
Belt tightener, 151705.
Belt, waist, 542306.
Belting—see Rawhide, Rubber.
Belting and apparatus therefor, stretching, 269519.
Belting, cotton, 228186.
Belting, machine, 352548.
Bending angle irons, 283186.
Bending block for car door guide rod, 337006.
Bending wood, 50602, Reissues 853, 1312.
Benzo-purpurine, 329632, 47 F. 319.
Beverage, 193038, 198467.
Bicycle, 240905, 392973. See also Pedal, Saddle, Velocipede, Wheel.
Bicycle bell—see Bell.
Bicycle brake, 312473.
Bicycle coaster brake, 199 U. S. 581.
Bicycle crank hanger, 550587.
Bicycle handles, 245071.
Bicycle pump coupling for, 507224.
Bicycle saddle, 293725, 314142, 331001.
Bicycle seat, 252280.
Bicycle tire, Reissue 11216. See also Tire.
Bicycle wheel, wooden rim for, 506430.
Bilge lever for ship, Nov 6, 1826.
Billiard chalk, artificial, 578514.
Billiard register, 57443
Billiard table, 119262, 203108, Reissue 6469.
Billiard table cushion, Reissues 2511, 3323.
Binder—see Grain binder, Harvester, Twine binder.
Binding, celluloid, 405874.

Bin, tilting, 447532. See also Tilting.
Binding for skirt, 61172.
Binding papers, 226402.
Bird cage, 162400, 218758, 23 F. 418.
Biscuit pan, 96605.
Bit, bridle, 387048, 117 F 316.
Bit stock, 73279, Reissue 6350.
Blacking and burnishing boots and shoes, Reissue 11144.
Blank book, 393506, 393507. See also Account book.
Blankets, method of putting up, 33 F. 45.
Blast furnace, Reissue 3204.
Blast furnace, bosh plate for, 452618.
Blast furnace casting apparatus, 608143, 636885.
Blasting—see Squib.
Blasting rock, method of and tool for, 291606.
Bleaching hair, Reissue 8637.
Blind, fire-proof, 572014, 682304.
Blind slat, 199948.
Blind slat, machine for finishing, 389826.
Block—see Snatch, Type.
Blooms, metal, rolls for rolling, 303036.
Blowers, cases for rotary, Reissue 3570.
Blowers, rotary, 104585.
Blue coloring matter, 524254.
Board, game, 602179, 666749.
Boat—see Steam.
Boat, dredge, 72360.
Boat, fishing, 456720.
Boat, foot-board for, 231017.
Boat, portable, 389817, 507439.
Bobbin—see Winding.
Bobbins and spindles, 123625, Reissues 6016, 6036.
Bobbin, sewing machine, 123625.
Boiler, Reissue 4467. See also Paper pulp, Steam.
Boiler, applying waste heat to, 1630.
Boiler, base burning, 122360.
Boiler covering, 98865, 100354, 108055, Reissues 4134, 8752.
Boiler deflector, steam, 349720.
Boiler for paper pulp, 25418, 38901.
Boiler headers, machine for making serpentine, 674555.
Boiler, manhole cover for, 339998.
Boiler, sectional, 224685.
Boiler, sectional steam, 84 F. 346.
Boiler, steam, 304195, 309727, Reissue 6422.
Boiler, steam, covering, 55598, 114711.
Boiler, steam, safety apparatus, 5254.

BOILER—BOOT

Boiler supporting lug, 491091.
Boiler, water tube, 233228, 349039, 479678.
Bolster—see Spindle.
Bolster, car, 314459, 339913.
Bolster for railway cars, body, 632180.
Bolt, Nov. 17, 1776.
Bolt anchor, 725278.
Bolt, car door, 228241.
Bolt for door, 48555, Reissue 9901.
Bolt lock, 283725.
Bolt manufacture, Reissue 6291.
Bolter—see Flour.
Bolting flour, 37319, 37320, Reissue 5841, 6030, 6594, 6595. See Flour.
Bond register, 63419, 19 F. 313.
Bonnet, 19932, 33978. See Hat.
Bonnet machine, Reissues 933, 2257.
Book—see Account book, Blank book, Index, Match, Sales, Typewriter.
Book-binder's dry press and sheet tie, 204741.
Book binding, 239927, 281101, 379334, Reissue 8195.
Book case, 450124
Book case, sectional, 557737.
Book, check, Reissue 8199.
Book cover, celluloid, 488630.
Book, fly, for anglers, 333384.
Book sewing machine, 435613.
Boot, July 16, 1806, 59375. See also India rubber, Shoe, Slipper, Sole.
Boot, blacking, Reissue 11144.
Boot, box toe, 95894.
Boot burnisher, 28181.
Boot edges, finishing tool for, 150305.
Boot, felt, 336542.
Boot heel, abrading disk for polishing, 317622.
Boot heel machine, 105030.
Boot heel, mold for, 364217.
Boot heel polishing machine, 39546, 42555.
Boot heel stiffener, Reissues 6162, 6388.
Boot heel stiffener machine, 147288, Reissue 7356.
Boot lasting machine, 197607.
Boot, machine for flanging counters of, 243917.
Boot, machine for making, 178598.
Boot manufacture, 29562, 204068, 214684, Reissues 6480, 7510, 9043.
Boot nail, 164889.
Boot nailing machine, 163474, 184281, Reissue 7014.
Boot pacs, Reissues 6098, 6099.
Boot, screw peg for, 85374.
Boot seamer, 19 F. 424.

Boot shank, 68652.
Boot sole manufacture, 3857, 49572, 127964.
Boot stiffener mold and process of using same, 292514.
Boot stiffening, machine for making, 178869, 209826, Reissue 6319.
Boot tip, 242382, Reissue 3070, F. Cas. 9350.
Boot tree, 5876, 14951, 19508, 170462, 468006, 621423.
Borated cotton, 181024, 43 F. 672.
Boring apparatus, rock, 694535.
Boring machine, 170980, Reissue 404.
Boring rocks, process of, 694534.
Boring mill, 113651.
Boring well apparatus, 481636. See also Well.
Bosh plate for blast furnaces, 452618.
Bosom—see Shirt.
Bottle closure, 682995.
Bottle closure, sheet metal, 613371.
Bottle, jar, etc., mold for glass, 416389.
Bottle, machinery for manufacture of, 416376.
Bottle, means for capping and sealing milk, 411368.
Bottle, metal sealing cap for, 704167.
Bottle mold, 22129.
Bottle-sealing device, 468258, 541203, 582763.
Bottle soaking machine, 736037.
Bottle stopper, 44684, 48300, 167141, 225476, 232468, 289928, 327099, 438709. 491113, Reissues 1606, 2386, 7722, 8755, 9002, 11685, 33 F. 502.
Bottle stopper, wire bail, 377043.
Bottle washing machine, 213583, 690563.
Bottle wrapper, 639395.
Bow for ladies' wear, 41 F. 627.
Bowl—see Water closet.
Bowling alley, 623933.
Bowling alley runway, 599477.
Box, 132074, 329875. See Mail, Paper, Sand, Talking machine, Telephone.
Box, annealing, 149875.
Box, axle, dust, shield, 418439.
Box, cartridge, 139846.
Box corners, machine for attaching stays to, Reissue 11167.
Box covering and trimming machine, 298879.
Box, fare, 121920, Reissue 4240.
Box, fire alarm, 164425, 220088.
Box, hat, 573789.
Box hinge, 378861.
Box keel for ship, 367828.
Box loop, 216256.
Box loop for carriage top, Reissue 6974.

BOX—BREECH

Box machine, berry, 549375.
Box, machine for attaching corner stays for, Reissue 11167.
Box manufacture, 40507.
Box, match, 63104.
Box nailing machine, 276639, 342268.
Box or carton for biscuit crackers, etc., 621974.
Box, paper slide, 291615.
Box patterns, machine for cutting, 272354.
Box, shuttle—see Loom.
Box stay machine, 442582.
Box strap, 403178, 441353, 450753.
Box strap, metallic, 374587.
Box strap, method of and machine for making, 441354.
Box strap, reel for, 403247.
Bracelet, Reissue 4192.
Bracelet, chain for, 287564,
Bracelet, ornamenting, etc., Reissue 10239.
Bracket swift, 729084.
Bracket for supporting electric conductors, 418704.
Braiding machine, 430346.
Braiding machine racer, 575428.
Braiding machine racer, whip, 683276.
Braiding machine racer, whip lash, 432582.
Braiding machine, tension for whip Reissue 12058.
Brake—See Air, Bicycle, Car, Hoisting, Motor.
Brake beam, 466984, 480194, 486218, 609396.
Brake beam and shoe, 345093.
Brake beam, clamp for, 430755.
Brake beam fulcrum, 720676, 731668, 731865.
Brake beam, hollow metal, 361009.
Brake, railway car, 304863.
Brake, safety, for elevator, 347778.
Brake shoe, 40156, 45106, 49948, 174898, 423998, 543072, F.Cas.4151.
Brake shoe, railway, 292861.
Brake valve, air, 448827.
Brake valve, engineer's, 401916
Brake valve, engineer's air, 504290.
Break pin for grinding mills, 237320.
Break pin for stone grinding mills, 110397.
Brass kettle machine, 8589, 12227, Reissues 3995, 3996.
Bread finisher, Jan. 10, 1820.
Bread manufacture, May 18, 1826, March 2, 1836.
Breaker—see Circuit.
Breaker, coal, Reissue 142
Breech loader, Reissue 3117.
Breech loading—see Fire arm, Ordnance.
Breech loading cannon, 425584.

Breech loading fire arm, 52925, 88436, 101418, 230409.
Breech loading gun, 230823, 434062, 613195. See gun.
Breech loading musket, 15995.
Breech loading ordnance, 360798.
Breech loading ordnance—see Shell extractor for.
Bretzel—see Pretzel.
Brewing malt liquor, art of, 262761.
Brewing, mixture for, 249332.
Brick, fire, 149589, 150854.
Brick kiln, 471769.
Brick machine, 2768, 17999, 40221, 207343, 275467, 297671, 297675, 297917, 315855, 324453, 362204, 375660, 395871, 429296, 455374, 488622, Reissues 8127, 8867.
Brick mold sanding machine, 284115, 301087, 372698, 407030, 499206.
Brick or tile manufacture, 97.
Bricks of asphalt, machine to make, 289397.
Bridge, 50723, Reissue 2707, F. Cas. 17517. See Truss.
Bridge pier, 36512.
Bridle, 315672.
Bridle bit. 387048, 117 F. 316.
Bristle machine, 52763, 54033, 54034, 59286.
Bristles, preparing, 61480.
Bronze alloy, 201536.
Bronzing—see Iron.
Bronzing iron, Reissues 2355, 2356.
Bronzing leather, 83925.
Brooder—see Incubator.
Brooder, chicken, 215070.
Broom, 102936, 106021, 159409, 248252, 249884, Reissue 2598.
Broom case, 652542.
Broom corn cleaner, 505128
Broom for railroad track, 180717.
Broom making machine, 18770.
Broom, wisp, 218251.
Brush, 98787, 160933, 539903, 601405, 717014, 791510. See Dynamo.
Brush adjuster for dynamos, automatic, 223659.
Brush, air, 555669.
Brush and brush holder for dynamo, 394999.
Brush, carbon commutator, 390921.
Brush making machine, 570604.
Buckskin, imitation, 511789.
Bucket for chain pump, 347342.
Bucket, water wheel, 454638.
Buckle, 69181, 209701, Reissues 1483, 7129, 8541, F. Cas. 12368. See Overshoe, Shoe.
Buckle and buttonhole, metallic, 372062.
Buckle, harness, Reissue 8829.

BUCKLE—BUTT

Buckle, lever, 172527.
Buckle lever, machine for making, 228136, 231199.
Buckle, overshoe, 301884.
Buckle, suspender, 295035.
Buckle, wire, 286264.
Buffing pad, 238201.
Buffing wheel, 306463.
Building—see Iron.
Building, fireproof, 456202.
Building, construction of, 302338.
Building, metallic covering for, 177986.
Bung, 203316, Reissues 5937, 10175.
Bung bush, wrench for extracting, Reissues 5026, 5027.
Bung, bushing for cask, Reissue 8759.
Bung cutter, 72505.
Bung fastener and cover, 215178, 244282.
Bung, rendering wooden bung impervious, 87163.
Buoy, electric light, 184553.
Burglar—see Safe.
Burglar alarm, electric, 103383, Reissue 4297.
Burner—see Gas, Incandescent, Lamp, Oil.
Burner for gas, 17530, 104271, 105768, Reissue 6833.
Burner for vapor, 17916, 20324, Reissues 7706, 8784, F. Cas. 7254.
Burner, hydrocarbon, 616425, Reissues 11592, 11601, 11657.
Burner, incandescent and method of using the same, 447757.
Burner, oil, 475401, 617291.
Burner, oil or gas, 424964.
Burner, oil stove, 702560.
Burner, vapor, 438548, 461219, 467466.
Burner, vapor stove, 235600.
Burning fluid, 38015.
Burning hydrocarbon, apparatus for, 397336.
Burning oil, 63229.
Burnisher for boot, 28181.
Burnishing knife blades, machine for, 241750.
Burnishing machine, sole edge, 173284.
Burnishing machinery, 293826.
Burr for knitting machines, 240008.
Bushing for faucet holes, Reissues 8483, 10368.
Business system, 465485.
Business system, freight, 493595.
Busk fastening, 171882,
Bustle, 17082, 54323, 164340, 266185, 369979, Reissue 5563, 23 F 86, 30 F. 67.
Bustle manufacture, 22532.
Bustle, wire, 626207.
Butt weld tubing, 581251.

Butter worker, 490105.
Button, 56261, 325430, 405179, 429530, 439920, 17 F. 845. See Collar. Mold, Sewing machine, Shoe.
Button, apparatus for cutting pearl, 450057.
Button attaching device, 293234.
Button attaching machine, 310934.
Button attachment for corset, 345037.
Button, cuff, 319997.
Button fastener, 247032, 266941, 382342, 451070.
Button fastening machine, 55 F. 23, 65 F. 620.
Button fastening staple, 324053.
Button hole, 372062. See Sewing machine.
Button hole attachment, 166810.
Button hole cutter, 247766
Button hole machine, 438655.
Button hole machine feed attachment, 197528, 219656.
Button hole, machine for cutting and stitching, 447791.
Button hole, method of working, 329635.
Button hole sewing machine, 240546.
Button hole stitching and barring machine, 450844, 450950.
Button machine, 228233.
Button, machine for making, 228233.
Button, metallic, 216973, 548143.
Button parts, device for assembling, 520999.
Button, separable, 357237, 573532, 580000, 580001, 600114, 645624, 735655.
Button setter, 312987.
Button sewing machine, 268369.
Button shanks, 110070.
Cabinet, 403939. See Lock.
Cabinet for liquor, 537434.
Cable, barbed wire, 233116.
Cable car grip, 160757, 189204, 371599.
Cable, electric, conduit, 395584.
Cable, process of suspending, 274562.
Cable railway, 179016, 182663, 195372, 195505, 224284, 262126, 271-726, 271727, 357162, Reissue 10681.
Cable railway, elevated, 367252.
Cable railway, grip for, 520259.
Cable, tension for street car, 193939, 244147.
Cable tramway for curves, 241044.
Cable, underground, 273869.
Cage, bird, 162400, 218758, 23 F. 418.
Cage, wire, Reissue 8594.
Caisson gate, 287178.
Cake cutting machine, 209365.
Cake machine, 269535.

Cake pan, 140619.
Calcining—see Ore, Roasting.
Calcining furnace, 559647, 640058.
Calcining ores, apparatus for, 46287.
Calculagraph, 583320.
Calendar, 95655.
Calf weaner, 419078.
Calipers and dividers, spring, 319215.
Calking vessels, method of, 527169.
Call box—see Telephone.
Calsomine—see Kalsomine.
Camera, Reissue 2311.
Camera, kinetographic, 589168, Reissue 12037.
Camera, multiplying, 620036.
Camera, photographic, 270133.
Camera, plate holder for, 116771, 159537, 294959, Reissue 1049.
Can, 43371. See Milk, Oil, Paint, Sealing, Tester for, Tin.
Can and can closure, 412134.
Can, apparatus for making tin, 366482.
Can body forming machine, 436792, 442484, 444000, 598567, 712998.
Can capping machine, 629574.
Can cap soldering machine, 109577, 365316.
Can crimper and capper, 376804.
Can ending machine, 274363, 307197. 307491.
Can filling machine, 281767.
Can for milk, 207822, Reissne 9811.
Can forming and soldering machine, 395795.
Can for obtaining cream from milk, 321340.
Can for paint, 24748, 26268.
Can for transporting cream, Reissue 9811.
Can heading machine, 267014, 294065, 299825, 322060, 382567, 450624, 472284, 477584, 499949.
Can, key opening, 543347.
Can, machine for closing seams of metallic, Reissue 4777.
Can, machine for crimping heads on tin, 214292.
Can, machine for making seams of sheet metal, 250266.
Can, machine for soldering, 63220.
Can making machine, 279853, 395788, 440000, Reissue 3143.
Can, machine for soldering side seams of, 250096.
Can, manufacture of tin, 42351.
Can, oil, and filler, 420812.
Can, oil, non-overflow, 515124.
Can seaming machine, 443445.
Can, sheet metal, 52972, 207058, Reissues 7682, 7923.
Can, tool for soldering tin, Reissue 10672.
Can with rip-strip, lock seam, 539366.
Canal boat, device for steering, Reissue 5630.

Canal, construction of pleasure, 448072.
Candle, apparatus for shaping and finishing, 330200.
Candle machine, 12492.
Candle, sulphur, disinfecting, 390314.
Candy, machine for cutting, 532554.
Candy manufacture, 289488, 356394.
Candy, method of pulling, 736313.
Candy, packing stick, Reissue 9942.
Cane, machine for breaking and cutting, 349503.
Cane work, machine for inserting strips in, 401050, 539406.
Cannon—see Ordnauce.
Cannon, breech loading, 425584.
Cannon shell, 45462
Canopy top, 191233.
Caoutchouc, 1090, 10339, Reissue 797. See also Rubber.
Caoutchouc cutting machine, 37446, Reissue 5903, F. Cas. 686.
Cap, Reissue 7808. See Hat.
Cap for preserve jar, 117236.
Cap, knit. 669011.
Cap, mode of preventing corrosion of, Reissue 9909.
Capstan, 52730, 63717.
Capsules, gelatine, Reissues 8440, 10437, 10807.
Capsule machine 187279, 275092, 305867.
Car—see Brake, Shoe for, Stock car, Trolley, Truck, Wheel.
Car and wagon unloading apparatus, Reissue 4212.
Car axle—see Lubricator.
Car axle box, 239702 See also Axle.
Car axle box lid, 211854, 379712.
Car axle box dust shield, 418439.
Car bolster, 632180.
Car brake, 8552, 9109, 503121, Reissues 231, 5504, 5506.
Car buffer, 373098, 32 F. 628.
Car, coal and ore, 349134.
Car, convertible railway. 709073, Reissue 11992.
Car coupler, 254093, 254106, 326401, 337650, 337780, 373098, 389510, 401775, 462413, 467249, 541446, Reissue 10941. See Coupling.
Car door guide rod, bending block for, 337006.
Car, drawbar attachment for, 588722.
Car, dump, 45 F. 424.
Car dumping machine, 560727.
Car for coal, 5175.
Car for petroleum, Reissue 2261.
Car for railroad, March 18, 1829, Oct. 25, 1832, Oct. 1, 1834, 389, 13-364, Reissues July 10, 1834, Apr. 28, 1836, F. Cas. 2610, F. Cas. 4788.
Car for railroad, doors for grain, 203226.

Car for railroad, hand, Reissue 5274.
Car heater, electric, 500288.
Car heater, steam, 389017.
Car heating apparatus, 472689.
Car lamp, 329718.
Car life guard, 454214.
Car, oil, 216506.
Car pipe coupling, 47 F. 663.
Car roof, 414069, 446780.
Car, running gear of railroad, 50518.
Car seat, 359354, 626831.
Car, sleeper, Reissue 6648, 1 Bond 528.
Car starter, 498736.
Car, street, 93322, 142810, 167565, Reissue 6697.
Car truck, F. Cas. 5795.
Car truck bolster, 314459, 339913.
Car truck, electric motor, 373639.
Car ventilator—see Ventilator.
Car, ventilator and refrigerator, Reissue 11324.
Car, vestibule connection for, 403137.
Car wheel, 173869. See Mold.
Car wheel and axle box, 330972.
Car wheels, abrading shoe for truing up, 605056.
Car wheels, manufacture of, 249102.
Car window, 193014.
Carbine holder, 223899.
Carbon—see Incandescent.
Carbon commutator brush, 390921.
Carbon copying record book, 390087.
Carburetting air apparatus, 93267, 93268.
Carburetting attachment for gas fixtures, 333869.
Card board, process of ornamenting, 388569.
Card, embossed, 273033.
Card guilding machine, 363936.
Card index or record, 633857, 624597.
Cards, machine for punching from printed sheets, 381716.
Card, visiting 219464.
Carding—see Wool.
Carding engine, 6135.
Carding engine, condensing cylinder for, Reissue 10054.
Carding engine, grinding device for, 464929, 639553.
Carding machine, 14481, 18124.
Carding machine, device for grinding teeth of, 544441.
Carding machine, feed mechanism for, 718130.
Cards for cotton and wool, June 5, 1779
Cards for wrapping threads, Reissue 6751.
Cards, lock rod for, 638696.

Carpenter—see Square.
Carpet fabric, 312220, 382157, 497294.
Carpet, fastener for stair, 587633.
Carpet lining, 276118, Reissues 4066, 4296.
Carpet lining machine, Reissue 2415.
Carpet renovator, pneumatic, 634042, 663943, 665983.
Carpet stretcher, 154848, 298856.
Carpet sweeper, 186895, 233371.
Carpet yarn, process and apparatus for printing, 603992.
Carriage—see Log.
Carriage, adjustable form for setting and building, 378457.
Carriage and chair, combined child's, 224923.
Carriage body, 261829.
Carriage body and seat, Reissue 4780.
Carriage door, 53075.
Carriage for children, 74284, 101295, 143421, Reissues 4223, 10363.
Carriage, fountain hose, 183188, Reissue 10047.
Carriage, shifting seat, 497765.
Carriage spring, 123937, 197659, Reissues 6018, 7017.
Carriage step, 135815.
Carriage thill blank manufacture, 66130.
Carriage tops, machine for trimming, 458252.
Carriage wheel, 17520.
Carrier—see Hay.
Carrier attachment to folding machine, 322344, 331762.
Carrier, egg, 533331.
Carrier for cycles, luggage, 444642.
Cart, breaking, 232207.
Cart or wagon, child's toy, 651658.
Cart, road, 371090, 459098.
Carton for crackers, 621974.
Cartridge, 15996, 43851 See Priming, Signal.
Cartridge anvil, 220472.
Cartridge assembling machine, 232907.
Cartridge belt, 756178.
Cartridge belt, seamless woven, 756177.
Cartridge box, 139846.
Cartridge case machine, Reissue 1948.
Cartridge gauging machine, 208903.
Cartridge heading machine, 241962.
Cartridge loading machine, 97904, 464883.
Cartridge, metallic, 212313.
Cartridge weighing machine, 185858.
Cartridges, machine for making paper, 237605.
Cartridges, machine for priming, 181309.
Cartridges, method of making, 20727.
Carving machine, 443802.

CARVING—CELLULOID

Carving machine, wood, 571535.
Case—see Map, Shipping, Spectacle, Tape measure, Watch.
Case, comb, 184310.
Case, eyeglass, 589676.
Case for exhibiting decorative art, 392038.
Case, medicine or sample, 526486.
Case, sash pulley, 185369.
Cash and package carrier, 623899.
Cash and parcel carrying system, 295172.
Cash carrier, 255525, 276441, 284456, 290190, 293192, 309197, 309198, 309199, 309200, 309201, 309202, 309505, 325425, 357851. See Package carrier, Store service apparatus,
Cash carrier apparatus, 399428.
Cash indicator and recorder, 398625.
Cash indicator and register, 398898.
Cash register, 253506, 271363, 416029, 499294.
Casing—see Razor.
Casing, water wheel, 633962.
Cask—see Relief valve.
Cask scrubbing machine, 213447.
Casket handle, 478168.
Casket, metallic, 482557.
Cast iron wheel, 640, 5531, Reissue 468.
Caster for bedstead, 821.
Caster for salt, 39889, 71643.
Caster for syrup, Reissue 2406.
Caster, furniture, 190152, 273298, 318533, 342930, 345613.
Caster socket, 594937.
Casting—see Mold, Molding, Rollers, Stereotype, Trap, Type.
Casting copper cylinder, 24915.
Casting copper tube, 125044.
Casting iron pipes, flask for, 37037.
Casting tubular articles, 159553
Casting wheel for car, 110779.
Casting, wrought iron, making by adding aluminum, 333373.
Catch—see Spectacle case.
Catch basin cover, 204882.
Catheter, 390177, 53 F. 925.
Cattle guard, 403532.
Cattle guard, railway, 373359.
Cattle guard, surface, 418014, 421928.
Ceiling, fire proof, 285452. See also Fire proof.
Ceiling, metallic, 158881.
Ceiling plate, 299203, 330915, 330916, 388285.
Ceiling, sheet metal, 361438, 376926.
Celluloid articles, 542452
Celluloid book cover, 488630.

Celluloid collars and cuffs, 200937.
Celluloid comb manufacture, 223311.
Celluloid, manufacture of, 156353.
Celluloid or analogous bindings, 405874.
Cellulaid sheets, manufacture of, 199908, 387947.
Cement for steam joints, 36 F. 323.
Cement joints, tool for dressing, 334125.
Centrifugal—see Milk, Cream.
Centrifugal creamer, 293314.
Centrifugal machine, Reissue 2845.
Centrifugal machine, self-balancing, 82049.
Cereals, preparation of, 341355
Cess pools, apparatus for cleaning, 138034,
Chain, apparatus for making sheet metal, 202528, 368275.
Chain clip for cloth stretching, 503301.
Chain, drive, 237771, 264139, 324734, Reissue 10444, 30 F. 871.
Chain, endless, conveyor, 503870.
Chain for bracelet, 287564.
Chain for check row corn planter, 230604, 259677.
Chain for necklace, Reissue 5774.
Chain links, 30 F. 873
Chain links, machine for coupling, 377376.
Chain, ornamental, 230745.
Chain stretching machine, 43987.
Chain, watch, machine, May 4, 1820.
Chair, 328838, 329805, 416324, Reissue 9094. See also Invalid, Rocking, Seat.
Chair and carriage, combined child's, 224923.
Chair backs, support for Morris, Reissue 11919.
Chair, barber's, Reissue 7320.
Chair, dentist's, 369295.
Chair, folding, 97778, 221062, 5 F. 302.
Chair, foot rest, 668268.
Chair for railroads, 316995.
Chair, for street car rails, 364996.
Chair, Morris, 667162, 678219.
Chair, platform rocking, 313429.
Chair, rocking, 1531, 92379, Reissue 9046.
Chair, rolling, 675693.
Chair seat, 185576.
Chair spring, 297108.
Chair, street railroad, 312259.
Chair, tilting, 185501.
Chair, wheeled, 185193.
Chalk, billiard, artificial, 578514.
Chalk drops, machine for making and drying, 343755.
Chamois or buskskin, imitation, 511789.

CHANDELIER—CIGARS

Chandelier, extension, 205068.
Channel strips for baskets, machine for forming, 482484.
Check—see Door.
Check book, Reissue 8199.
Check holder, baggage, 268591.
Check protector, 401871, 584518.
Check row—see Corn planter.
Checks and drafts, safety device for, 268988.
Cheese former for cider press, 187100.
Cheese hoop, 122520, Reissue 8832.
Cheese manufacture, Reissue 6117.
Cheese press, Reissue 5256.
Chemical fire extinguisher, 147442.
Chest and neck protector, 593954.
Chewing gum, 111798.
Chicken brooder, 215070.
Chimney, 512504. See also Lamp.
Chimney cowl, 674940.
Chipping glass, 405283, 494999.
Chlorine gas, hydrating, 186860.
Chloroform, process of making, 322194.
Chocolate—see Confectionery.
Chocolate cream dipper, 526968.
Chocolate dipping or coating machine, 533974.
Chop grader, 428908.
Chopper—see Meat.
Chopper, food, 626212.
Churn, 7531, 378144, 418355, 12 F. 485.
Churn and butter worker, 490105.
Churn closure, 418356.
Chute, coal, Reissue 7341.
Chute for delivering timber, 107611.
Chymosin and pepsin, 344433
Chymosin and pepsin, process of manufacture, 338471.
Cider press, cheese former for, 187100.
Cigar, 186628. See Mold.
Cigar band, 715512.
Cigar bunching machine, 331676.
Cigar cutter, 398345.
Cigar lighter, 206835.
Cigar lighter, electric, 522934, 562395, 598489, 628982.
Cigar maker's implement, 290811.
Cigar mold, 258940, 530794. See also Mold.
Cigar tip cutter, 533207, 533208, 567277.
Cigar wrapper cutting machine, 315408, 594835.
Cigars, machine and method for wrapping, 261849.

Cigarette machine, 184207, 216164, 231779, 238640, 247795, 260959, 308556, 470269, 512151, Reissue 11104.
Circuit—see Telephone.
Circuit breaker, automatic, 500456, 633772.
Circuit breaker for electric lamps, 247103.
Circuit closer, electric, 356963.
Circuit controller for arc lamp, 502535.
Circuit opener, electric, 279107.
Circuit protector, thermal electric, 744197.
Circular—see Saw.
Circular loom, 361994.
Cistern, water closet, 566770.
Clamp—see Rope.
Clamp, drill, 186225.
Clamp for clorh stretching, 571508.
Clamp, wire rope, 388840.
Clapboard joint, Reissue 3268.
Clasp, 136 F. 487 See also Overshoe, Shoe.
Clasp, album, 42 F. 454.
Clasp, coil, 433791.
Clasp, corset, 143359.
Clasp for hitching devices, 161757.
Clasp for pocket book, 47135, Reissues 8106, 8123.
Clasp, spring, 418924.
Clasp, whip socket, 166724.
Clay disintegrator, 322393, 368898.
Clay press, 169871.
Cleaner, cotton, 16833, 29971.
Cleaner, grain, 542, Reissue 10275.
Cleaner, window, Reissue 8393.
Cleaning—see Roads, Thrashing machine.
Cleaning and polishing, composition for, 693556.
Cleaning, cotton, 18742, 52008.
Clip—see Harrow.
Clip, chain, for cloth stretching, 503301.
Clipper—see Hair.
Clipper, finger nail, 569903.
Cloak, 296021.
Clock, base for, 594309.
Clock dial, Reissue 6580.
Clock, electric, 274325.
Clock escapement, pallets of, 84517.
Clock movement, Reissue 10062.
Closet—see Toilet, Water.
Closet, dry, 314884.
Closet, water—see Tank.
Closure, jar, 483033.

Cloth—see Pressing machine, Rubber.
Cloth and paper, uniting, 134105.
Cloth cutting attachment—see Sewing machine.
Cloth cutting machine, 124180, Reissue 5186.
Cloth measuring machine, 507300.
Cloth napping machine, 377151.
Cloth stretching, chain clip for, 503301.
Cloth stretching, clamp for, 571508.
Cloth, tenting, 718499.
Cloth trimming—see Sewing machine.
Cloth, wire, 239012, 304154.
Clothes tag, 149896.
Clothes wringer, Reissues 1934, 2829, 5223.
Clothing dummy, 76394.
Clothing, receptacle for, 642075.
Clover huller, 188064, Reissue 1299.
Cluster of electric lamps, 721774, 721777.
Clutch, 672056. See also Friction, Traction engine.
Clutch, friction, 655440.
Clutch mechanism, Reissue 12085.
Coal and ore car, 349134.
Coal breaker, Reissue 142.
Coal car—see Car.
Coal hod, 279502, 304033.
Coal hod and method of making same, 279871.
Coal, method of supplying locomotives with, Reissue 10417.
Coal mining machine, 232792, 267047, Reissues 9408, 9439.
Coal screen and chute, Reissue 7341.
Coal screen, revoluble, 500508.
Coal scuttle, 150921, Reissue 3438.
Coal wagon, 73684, 532216, Reissue 9368.
Coach pad. 173371.
Coaster, 411255.
Coasting—see Roller.
Coat and method of making same, 364219.
Coating—see Confectionery.
Coating compound, 86841.
Cob carrier for corn sheller, Reissue 7851.
Cob, removing corn from, 94013, Reissue 8854. See Corn sheller.
Cock, combination, 472689.
Cockle machine, 274797.
Coffee maker, 710132, 710133.
Coffee mill, Reissues 7583, 8866.
Coffee pot, drip, 650129.
Coffee roaster, Reissue 9260.
Coffee, treating, 111403, 726812, 736346, Reissue 4479.

Coffin handle, 559898.
Coffin lid, 38713.
Coffin, face plate for, 619567.
Coil—see Induction.
Coil, clasp, 433791.
Coil, movable, for electrical measuring, 470340.
Coil shaped fasteners, 482965.
Coil, wire, fasteners, 593406.
Coiling metal rods, apparatus for, 426067, 444652.
Coiling wire, 153 U. S. 120.
Coin controlled apparatus, 502891, 514664.
Coin controlled mechanism—see Vending machine.
Coin controlled weighing machine—see Weighing.
Coin holder, 449280.
Coin receptacle and register, toy, 384523.
Collar, 132547, Reissues 1646, 1828, 7920, 8169. See also Paper.
Collar and cuff, 200939, Reissues 1980, 5259.
Collar button, 177253, 202412, 298303.
Collar, casing for horse, 699151.
Collar. celluloid, 200937.
Collar, foundation for dress, 669152.
Collar ironing and shaping machine, 627889.
Collar, machine for folding and curling, 258334.
Collar pad—see Horse.
Collar turning and ironing machine, 608720.
Collector—see Dust.
Collodion, making solidified, 156352.
Color compound, napthol black, 345901
Coloring—see Tobacco.
Coloring compound, sulphonated rosaniline, 250201.
Coloring glassware, 382105.
Coloring matter, blue, 524254.
Coloring matter from logwood, 491972.
Column, Reissue 1651.
Column, fireproof, 154852, 191662, 199887.
Comb, 72324, 223311.
Comb case, 184310.
Comb, celluloid, 223311.
Comb, curry, 220986, 407313.
Comb for retaining the hair, 682448.
Comb, grate, 14 F. 42.
Comb teeth, Feb. 22, 1798.
Combination—see Lock.
Combination garment, 374307.
Combustion, apparatus for improving, 556280, 556282, 556283, 556-285.
Commutator bar for dynamo, 392490.

COMMUTATOR—COOLING

Commutator brush, carbon, 390921.
Compartment sleeping car for railways, 122622.
Compasses, electric recording device for, 472124.
Compositor's copy distributor, 149092.
Compressing metal articles in dies, machine for, Reissue 2124.
Computing—see Scale.
Computing machine, 628176.
Computing machine, recording, 465255.
Concentrator—see Ore.
Concrete arches, 98571.
Concrete pavement, 174648.
Concrete piles, 733286, 733288.
Conductor—see Insulated.
Conductor, electric, bracket for supporting, 418704.
Conductor, electrical, Reissue 10945.
Conductor, pneumatic, for elevator signals, 307049.
Conductor, process of applying asbestos insulation to electrical, 534-785, 709001, 740131.
Conductor's register, 76646.
Conduit—see Insulated.
Conduit, armored insulated electric, 564174.
Conduit, electric wire, 396407.
Conduit for electric cable, 395584.
Conduit for wires, apparatus for laying, 467650.
Confectionery, machine for coating, 492576, 634633.
Confectionery with chocolate, machine for coating, 492205.
Contact arm for electric railway motor cars, 408638.
Contact arm, standing, 405750.
Control mechanism for electric motors, 555503, 578707.
Controller, rheostat, 676426.
Controller—see Elevator.
Controller, circuit for arc lamp, 502535.
Controller, electric, 587733.
Controller, electric car, Reissue 11918.
Controller for electric motors, current, 545664.
Converter—see Transformer.
Converter for copper ores, 470644.
Convertible car, 709073, Reissue 11992.
Conveying—see Hoisting.
Conveying and storage apparatus, 668960.
Conveying and storage apparatus, coal, 688111.
Conveying apparatus, 399150.
Conveying belt idler pulley, 571604.
Conveyor, endless chain, 503870.
Conveyor, cotton, 308790, 362041.
Cooking oil meal, 308112.
Cooling—see Transformer.

Cooling alternating current transformer, 366362.
Cooling saline solutions, apparatus for, 362938.
Cop, 486745. See also Winding.
Coping, wall, 313583, 370437, 371574.
Copper cylinder, casting, 24915.
Copper-lined bath tub, 80441.
Copper ores, converter for, 470644.
Copper tube, casting, 125044.
Copy distributor, compositor's, 149092.
Copying book, 224529.
Copying record book, carbon, 390087.
Copying sales book, manifold, Reissue 10359.
Cord—see Rope.
Cord holder for grain binder, 262883.
Corded elastic fabric, Reissues 2843, 2844, 3014.
Core—see Watch.
Core lifter, 39 F. 284.
Core lifter for rock drill, 147492.
Core making machine, 513998.
Corer—see Apple.
Corn—see Preserving, Starch.
Corn cutter, green, 159741.
Corn, food product from, 223847.
Corn knife, 51379.
Corn, method of separating in the stalk, 290571.
Corn planter, 46629, 225318, 279822, 480304, 539495, Reissues 1935, 10155, 128 U. S. 506.
Corn planter and fertilizer distributor, combined, 324983.
Corn planter, check row, attachment for, 326449.
Corn planter, knotted wire for check-row, 328452.
Corn planter, machine for making wire chains for check-row, 230604, 259677.
Corn, removing from cob, 94013 Reissue 8854.
Corn sheller, 38002, 132128, 188263, 247338.
Corn sheller, cob carrier for, Reissue 7851.
Corner stays for boxes, machine for attaching, Reissue 11167.
Corrosion of metallic caps, mode of preventing, Reissue 9909.
Corrugating machine, 473019.
Corrugating pipe, method of, 473020.
Corset, 137893, 197913, 224076, 238100, 254992, Reissues 2165, 6100, 8114.
Corset and bustle manufacture, 22532.
Corset back, 243519.
Corset clasp, 143359.
Corset skirt supporter, Reissues 2654, 4831.
Corset spring, Reissues 3624, 5216, 7729.
Corset stay, 27 F. 289, 44 F. 19.

CORSET—CREAM

Corset stays, manufacture of, 316034.
Corset steel tipping machine, 589579, 589580.
Corsets, flexible button attachment for, 345037.
Cotton—see Baling, Lint.
Cotton and hay press, Reissues 8130, 8292, 8296.
Cotton and wool cleaning, 3120.
Cotton, baling press for, 510388.
Cotton, borated, 181024, 43 F. 672.
Cotton cleaner, 16833, 29971.
Cotton cleaning, 18742, 52008.
Cotton conveyor, 308790, 362041.
Cotton elevator and gin feeder, 644532.
Cotton gin, 167679, Reissues 140, 6169.
Cotton gin feeder, 488446.
Cotton gin rib, Reissue 17.
Cotton press, 199052, Reissue 92, F. Cas. 17616.
Cotton seed and hulls from fiber, process and apparatus for separating, 530533.
Cotton seed delinter, 503103, 613208, 659840.
Cotton seeder, Apr. 3, 1819, 3089.
Cotton to gins, device for feeding seed, 472607.
Couch bed, 667916.
Coulter, rolling, plow, 67222, Reissue 4533.
Counting envelopes, machine for, Reissue 9755.
Coupling—see Car, Cultivator, Thill.
Coupling and steering apparatus, Reissue 5630.
Coupling, car, 519216, 758268.
Coupling, chain links, machine for, 377376.
Coupling for barges, 111564.
Coupling for horse cars, Reissue 906.
Coupling, wire, 428123, 575641.
Coupon and bond register, 63419, 19 F. 313.
Cover, catch basin, 204882.
Cover, manhole, 446151.
Covering—see Boiler, Pipe.
Covering, fastening metallic, Reissue 4870.
Covering harness trimming—see Harness.
Cowl, chimney, 674940.
Cracker machine, 90577.
Crackers and pretzels, apparatus for treating, 345186.
Crackers, carton for, 621974.
Crane, electric, 430487.
Crank hanger, bicycle, 550587.
Crate—see Refrigerator.
Crate, poultry, 444561.
Crayon machine, 476038, 476051.
Cream, can for transporting, Reissue 9811.

Cream from milk, 187516.
Cream separator, centrifugal, 239659, 521722.
Creamer, centrifugal, 293314.
Creamery, 207738.
Creaming machine, centrifugal, 195515.
Crimper, hair, 218300, 39 F. 273.
Crimping—see Leather.
Crimping device for glassware, 327406.
Crimping textile materials, 37033.
Crocheting or overseaming machine, 428508.
Cross cut—see Saw
Cross cut saw, handle, 78653.
Cross head—see Lubricator.
Crossing—see Trolley.
Crossing, girder slot rail, 367746.
Crown—see Tooth, Watch.
Crucible pots, molding, Reissue 4608.
Crupper, harness, 238446.
Crusher—see Coal breaker, Ore, Stone.
Crusher and pulverizer. 589236.
Crystalizing glass, 405283.
Cue rack, 72969.
Cuff, 200939, 533408, Reissues 1980, 5259. See Collar and cuff, Paper.
Cuff blanks, folding machine for, 645871.
Cuff button, 319997.
Cuff, celluloid, 200937.
Cuff fastener, 397119.
Cultivator, 4459, 10467, 22859, 31133, 91144, 130440, 174684, 237740, 354717, Reissues 1515, 2380, 2909, 3922, 5557, 6080, 7497, 7738. See also Plow.
Cultivator and seeder, disk, 344950.
Cultivator and weed cutter, 327683.
Cultivator axle, 187899. See Axle.
Cultivator, corn, 367530
Cultivator coupling, 127878, 190816, 260447.
Cultivator teeth, 16364.
Cultivator, wheeled, 222767, 242497, 329921.
Curette, 584407, 626625.
Curing—see Preserving, Tobacco.
Curling—see Hat.
Curling iron, 460709.
Current regulator for dynamo, 238315.
Currycomb, 220986, 407313.
Curtain fixture, 154400, 183809, 513307, Reissues 6925, 7182, 7367.
Curtain rod, 466940.
Curtain stretcher, 603690, 676895.
Curtain stretching frame, 617813.

CUSHION—DENTURE

Cushion, metallic pillow or, Reissue 11514.
Cushion or seat, metallic, 562940.
Cushion, spring seat or, Reissue 11508.
Cut out for electric motor, 365867.
Cutlery, 2435
Cutlery, hollow handled, 368051.
Cutlery, manufacture of, 241471.
Cut-off gear, Reissues 759, 763, 780.
Cut-out for electric motors, 565867.
Cut-out, safety, 433187.
Cut-out, thermal, 445217.
Cutter—see Roll paper.
Cutter, cigar, 398345, 533207, 533208, 567277.
Cutter's size ticket, combined cabinet and, 403939.
Cutting grass under water, machine for, 154900.
Cutting machine, cloth, 124180, Reissue 5186.
Cutting machine, paper board, 492927.
Cutting nippers, 329133.
Cutting paper, shades, etc., tool for, 408193.
Cutting pliers, 232975.
Cycles, luggage carrier for, 444642.
Cylinder—see Casting.
Dam, 225533, 28 F. 460. See also Water.
Dam, movable, 268411, 46 F. 486.
Dam, water, 80492, 85598, Reissue 6249.
Dampening—see Laundry.
Dampening machine, 401770.
Damper, furnace, Reissue 4695.
Damper regulator, 335080.
Damper, stove, 493548, 623417.
Dash board, 187450.
Dash board, rail for, 339307.
Dash frames, dies for making, 281553.
Dash frame, vehicle, Reissue 9891.
Dash, vehicle, 213529.
Dating stamp, 185862, 287177.
Decorating pottery ware, art of, 399029.
Decorating glass, 472230.
Decorations, paper, 603619.
Delinter—see Cotton seed.
Dental india rubber, 58901.
Dental plate, pyroxiline, 113055.
Dental plate, swage for, 537481.
Dental spittoon, Reissue 11696.
Dentistry, 238940.
Dentists' chair, adjustable, 369295.
Denture, 113055, 277933, 277941, 277943. See also Teeth.

Denture, artificial, 277491, 30 F. 775.
Denture, artificial, preparing roots of teeth for reception of, 277493.
Derrick, 103834, 124878.
Design, floral, 408416.
Desk, 86440, 115232.
Desk, adjustable, 113 F. 576.
Desk, school, 123797.
Desulphurizing ores, 45803.
Detergent, ammoniacal compound, 267455, 382322, 382323.
Dial, clock, Reissue 6580.
Die, 101529, Reissue 8694.
Die, face for car axle, 319754.
Die for forging car wheel tires, 271823.
Die for forging ox shoes, 314189, Reissue 6113.
Die for making dash frames, 281553.
Die for making eye bars, Reissue 11001.
Die for ornamenting paper, 228939.
Die for securing heel plates to rubber shoes, 296623.
Die for swaging, 68446.
Die for use in making axles, 434068.
Die holder, Reissue 9123.
Dies, machine for compressing metal articles in, Reissue 2124.
Digester—see Pulp.
Dip net, 245251.
Dipper—see Chocolate.
Dipping matches, 313064.
Disintegrator, clay, 322393, 368898.
Disk—see Harrow, Water meter.
Disk, grain drill, 557868.
Disk harrow, 301729.
Disk plow—see Plow.
Dispensing apparatus for beer, etc., 710291.
Distilling—see Smokeless powder, Tub, Turpentine.
Distilling apparatus, wood, 658888.
Distilling wood, process of, 674491.
Distribution—see Electric, Electrical.
Distribution, water, main for, 312158.
Distributor, compositor's copy, 149092.
Distributor, fertilizer, 324983.
Dividers and calipers, spring, 319215.
Door—see Jail, Knob, Lock, Safe, Stove.
Door bell, 471983.
Door bolt, 44555, 228241, Reissue 9901. See also Bolt.
Door, carriage, 53075.
Door check, 251790.
Door check and closer, 458357.
Door closer and check, spring, 289380.

DOOR—DRILL

Door closing apparatus, thermal, 680415, 680458.
Door fastening, 9765.
Door for grain car, 203226.
Door frame, interior, 385233.
Door hanger, 455695, Reissue 7795.
Door hanger, sliding, 369451.
Door hanger, wheel for, 422305.
Door knob, 318684.
Door knob attachment, 327820.
Door packing, refrigerator, 479973.
Door spring, 144926.
Dough, soft, machine, 209963.
Draft equalizers, 172756.
Draft, safety device for, 268988.
Drain faucet, 353723.
Drainage apparatus, house, 235754.
Drainer for saloon faucets, etc., Reissue 11371.
Drainer plate, 481981.
Draining and sewering towns, method of, 278839.
Drawbar and spring, 460426.
Drawbar attachment for cars, 588722.
Draw, railroad, 13258.
Drawers, 265733.
Drawers, ladies', 357127.
Drawing water from wells, 15273.
Dredge boat, 72360.
Dredge for salt or pepper, 752903.
Dredger and excavator, 257888.
Dredger for pulverulent material, 633941.
Dredging apparatus, 364158, 364571, Reissue 6598.
Dredging apparatus, hydraulic, 277177, 300333, 306368, 318859, 355-251
Dredging, art of, 318860.
Dredging machine, 104 F. 887.
Dredging machine, conveying pipe for, 601524.
Dredging machine shovel, 218427.
Dress form, 233239, 236887, 373988, 373989.
Dress form, adjustable, 233240.
Dress shield 205024.
Dress stay, 389993, 440246, 512113.
Dress waist, method of attaching stiffenings to, 327626.
Drier—see Fruit, Lumber.
Drier for fruit, 190368, 195948.
Drier for hides, 184352.
Drier for lumber, 79661, 189432, Reissues 8840, 8846.
Drier for sand, 121746
Drill—see Grain, Pneumatic, Rotary, Seed.

Drill clamp, 186225.
Drill for railroad track, 205927.
Drill for rocks, 52960, Reissue 3690, 2 F. 353.
Drill for wells, 22 F. 780, Reissue 6337.
Drill grinding machine, 411845.
Drill grinding machine, twist, 425839.
Drill, rock—see Core lifter.
Drill, seed, 30685. See also Grain drill.
Drilling jars, 78958.
Drilling machine, portable, 369120.
Drinking—see Trough.
Drip coffee pot, 650129.
Drive chain, 237771, 264139, 324734, Reissue 10444, 30 F. 871.
Driven well, Reissue 4372.
Driving—see Tack.
Drum, friction, Reissue 9289.
Dry closets, 314884.
Drying apparatus of envelope machine, Reissue 9800.
Drying kiln, 629202.
Drying rack for printed sheets, 504985.
Drying rack for printers, 392735.
Dry pressing, sheet tying, smashing and tableting machine, 452898.
Dummies for clothing, 76394.
Dump car, 45 F. 424.
Dumper—see Harvester.
Dumping machine, car. 560727.
Dumping wagon, 211052.
Duplex electric telegraph, Reissue 10035.
Duplicate—see Sales.
Duplicate whist, apparatus for, 525941, 555903.
Duplicate whist tray, 93 F. 822.
Dust collector, 403362, 403363, 403770, 407598, 408987, 409465.
Dust deflector, 13676.
Dust shield for car axle box, 418439.
Duster, feather, 154985, 177939, 385070.
Dye, 441, 225108, 261518.
Dye manufacture, 250247.
Dye stnffs, manufacture of, 253721.
Dyeing apparatus, 354281.
Dyeing hair, 305057.
Dyeing, reel for, June 27, 1809.
Dyeing silk woven fabrics, Sept. 9, 1818.
Dyeing yarn, Reissue 217.
Dynamite, 333347. See also Nitro glycerine.
Dynamo, 217677, 263140, 377996. See also Brush, Motor, Regulator.
Dynamo brush, 513611.
Dynamo, brush holder for, 462973.

DYNAMO—ELECTRIC

Dynamo, commutator bar for, 392490.
Dynamo, current regulator for, 238315.
Dynamo, electric, 463704.
Dynamo electric machine, 496449, 500403, 587573, 669574.
Dynamo, field magnet pole structure for, 573107.
Dynamo regulator, 264668.
Dynamometer, electric, Reissue 11250.
Earthenware, apparatus for molding, 474496.
Egg—see Incubator.
Egg beater, 254540, Reissues 1062, 6542.
Egg carriers, process of making cell cases or, 533331.
Elastic—see Fabric, Rollers.
Elastic toy, 23001.
Electric—see Conduit, Locomotive, Measuring, Meter, Railroad, Regulating, Regulator, Shunt, Signal, Smelting, Snap switch, Transformer, Trolley, Welding.
Electric annunciator for elevators, 148447, 172993.
Electric arc lamp, 147827.
Electric bath, 38389.
Electric battery, 20 F. 724. See also Galvanic.
Electric cigar lighter—see Cigar.
Electric circuit—see Safety catch.
Electric circuit closing apparatus, 356963.
Electric circuit opener, automatic, 279107.
Electric clock, 274325.
Electric conductor, Reissue 10945.
Electric conductor, bracket for supporting, 418704.
Electric crane, 430487.
Electric distribution, 351589.
Electric distribution and translation system, 264642.
Electric elevator, 471063.
Electric fan, 537679, 585250.
Electric furnace and method of operating same, 335058.
Electric gas lighter—see Gas.
Electric heat and vapor governor for spinning and weaving rooms, 222234.
Electric lamp, Reissue 8718.
Electric lamp, circuit breaker for, 247103.
Electric lamp, filament for, 369280.
Electric lamp fixture, 259235.
Electric lamp socket, 311100, 24 App. D. C. 286.
Electric lamps, cluster of, 721774, 721777.
Electric light, 317676, 20 F. 502.
Electric light buoy, 184553.
Electric light fixture, 248420, Reissue 11478.
Electric light, illuminating points, 196425, 20 F. 502.
Electric light, method of regulating, 321749.

Electric light lighter, 119561, Reissue 9743.
Electric lighting, wiring structures for, 401498.
Electric machine, dynamo, 496449, 500403, 587573, 669574.
Electric machine, static, 275347, 331754.
Electric motor—see Control. Controller, Truck.
Electric motor car truck, 373639.
Electric motor, cut out for, 365867.
Electric motor starting device, 373034.
Electric printing telegraph, 120133, Reissue 3810, F. Cas. 9858.
Electric railroad signal, 140536.
Electric railway motor, 324892, 338023.
Electric railway motor car, contact arm for, 408638.
Electric recording device for compasses, 472124.
Electric safe covering, 120874.
Electric telephone, 174465, 186787.
Electric telephone transmitter, 209266, 225388.
Electric telegraph, 1647, 4453, 4816, 6328, 6420, 42842, Reissues 117, 118, 3335.
Electric telegraph, duplex, Reissue 10035.
Electric telegraph, fire alarm, 8891.
Electric telegraph wire, 65019, Reissues 6954, 6955.
Electrical apparatus for lighting gas jets, 119561.
Electrical distribution, system of, 274290, 287516, 413293, 469809, 478344, Reissue 11836.
Electrical machine, 93563.
Electrical magneto-electric machine, 120057, 20 F. 112.
Electrical measuring instrument, 19 App. D. C. 373.
Electrical measuring instrument, movable coil for, 470340.
Electrically transmitting power, 382280.
Electro deposition of nickel, 93157, 102748, 113612.
Electro dynamometer. Reissue 11250.
Electro heating apparatus, 447023.
Electro magnetic motor, 381968, 382279.
Electro magnetic motor, method of operating, 401520.
Electrolier and fan, 585250.
Electrolysis—see Aluminum.
Elevated gravity and cable railroad, 367252.
Elevated railroad, portable, 285116.
Elevator, 25061, 32441, 60442, Reissue 7042. See also Hay, Hoisting, Lock, Thrashing machine.
Elevator controller, hydraulic, 359551.
Elevator, controlling device for, 456122, 457844, 457845, 458917.
Elevator, cotton, 644532.
Elevator, electric, 471063.
Elevator, electric annunciator for, 148447, 172993.
Elevator for grain, 34992, 258042, Reissue 10521.
Elevator for hay, 53345, Reissues 1869, 1871, 2260, 2429.

ELEVATOR—EVAPORATOR

Elevator for hods, 95262, 231021, 24 F. 182.
Elevator, freight and passenger, 257943.
Elevator governor, 228107.
Elevator guard, 648309.
Elevator, hydraulic, 132111, 172896, 181113, 248908, 309865, 317202, 328614.
Elevator, hydraulic air chamber for, 183055.
Elevator, hrdraulic, stop valve for, 173653.
Elevator, locking device for, 555825.
Elevator, operating device for, 453955.
Elevator, passenger, 107 F. 131.
Elevator, portable grain, Reissue 10521.
Elevator, safety brake for, 347778.
Elevator safety device, 132112.
Elevator signals, pneumatic conductor for, 307049.
Embossed card, 273023.
Embossing plastic material, process of, 332444.
Embroidering, sewing machine for, 83910.
Embroidery, 266525.
Enameled—see Iron.
Enameled basin, 285645.
Enameling iron ware, process of, 279094.
Enameling metal ware, 527361.
Enameling—see Molding.
Enameling moldings, 163825.
Engine—see Fire, Gas, Steam, Traction.
Engine frame, 396209.
Engine frame, horizontal, 144818.
Engine, gas, 430505, 583585, Reissue 11068.
Engine house gong, 165438.
Fngine, regulating steam for, 1868.
Engraving machine for etching glassware, 592920, 645333.
Envelope, 331118, Reissue 10488. See also Torpedo.
Envelope machine, 41395, Reissue 2529.
Envelope machine, drying apparatus of, Reissue 9800.
Envelope machine, folding device for, 648674.
Envelopes, machine for counting and packing, Reissue 9755.
Envelopes, machine for making and printing, 420792.
Envelope machine, packing and folding mechanism for, 672919.
Eraser—see India rubber, Pencil.
Eraser and pencil, 19783, 66938.
Escape, fire, 615999.
Escapement, clock, pallets of, 84517.
Etching glassware, engraving machine for, 592920, 645333.
Ether, 4848.
Evaporator, sugar, 341669.
Evaporator, vacuum, 378843.

Excavator, 85602. See also Dredger.
Excavator and dredger, 257888.
Excavator, sewer, 180718.
Excavator, hydraulic, 372956.
Excavator scoop, 54649.
Excelsior machine, 452553.
Exchange—see Telephone.
Exercise apparatus, 75217, 75218, 77933, 418257.
Exhaust head, steam. 303441. 405575, Reissue 10497.
Exhaust steam muffler, 209939.
Exhibiting decorative art, case for, 392038.
Explosive, 47458, 98854, Reissues 4818, 4819, 5798, 5799, 5800, 10267.
Explosive compound, 333344.
Explosive shell, Reissue 521.
Extension—see Table.
Extension chandelier. 205068.
Extinguisher—see Fire.
Extracting—see Tan bark.
Extractor—see Shell.
Extractor, lemon juice, 415048, 644736.
Eye bars, dies for making, Reissue 11001.
Eyeglass case, 589676.
Eyeglass holders, 175821.
Eye glasses, 412442 See also Nose guard, Nose piece.
Eye glasses, nose piece for, 695681.
Eye shade, 729500.
Eye shield, 540746
Fabric—see India rubber, Knit, Quilting.
Fabric, corded elastic, Reissues 2843, 2844, 3014.
Fabric, elastic, 493220, 539224.
Fan and electrolier, combined electric, 585250.
Fan, automatic, 338311.
Fan, electric, oil guard for, 537679.
Fanning mill, 267032.
Fare box, 121920, Reissue 4240.
Fare register, 206565, 231207, 233915, 265145, Reissues 7120, 8013, 8014.
Fastener—see Carpet, Glove, Paper, Rope, Shoe, Shutter, Staple, Trunk.
Fastener, cuff, 397119.
Fastener, garment, 652407.
Fastener, machine for making and inserting coil-shaped, 482965.
Fastener, rug, 541320.
Fastening, door, 9765.
Fastening for table legs, 480536.
Fat acids and glycerine from fatty bodies, manufacture of, 11766.

Fat, animal, treating, Reissue 5868.
Fat bodies, purifying, 11766.
Fat, method of treating animal, Reissue 10137.
Fats—see Animal, Rendering lard.
Faucet, 48407, 108898, 193840, Reissue 7571.
Faucet, force and drain, 353723.
Faucet holes, bushing for, Reissues 8483, 10368.
Faucets, saloon, drainer for, Reissue 11371.
Featherbone, 559827.
Feather duster, 154985, 177939, 385070.
Feather, ostrich trimming, 252374.
Feed mechanism—see Carding machine.
Feed mechanism for grain drill, 157478.
Feed water feeder, 93244, Reissues 2160, 3618.
Feed water heater, 81132, 349181, 385769.
Feed water heater and purifier, 274048, 400319, 542331.
Feeder—see Cotton gin, Steam.
Feeder and heater for steam boiler, 187825.
Feeder for thrashing machine, 556326.
Felt boot, 336542.
Felting—see Hat.
Fence, 397110. See also Barbed wire, Wire.
Fence making machine, wire, 628253, 708679.
Fence, wire, 518506.
Fermenting vessels, pressure in, apparatus for regulating, Reissue 10-284.
Ferrule, 410828
Ferry boat gangway, 308308.
Fertilizer, 206077, 367732.
Fertilizer distributor, 324983.
Fiber, vegetable, plastic compound for, 65267.
Fibrous matter, surface sizing, Reissue 1649.
Fifth wheel for wagon, 579857.
Filament for incandescent electric lamps, 369280.
File cutting machine, 29236.
File holder, Reissue 4864.
File, machine for cutting, 29239.
File, temporary, 438574.
Filing and binding papers, device for, 226402.
Filler for oil can, 420812, 515124.
Filling—see Torpedo.
Filling wood, 172534.
Film—see Photographic.
Film roll, photographic, 539713
Filter, 509126, Reissue 8894, 62 F. 582. See also Percolator.
Filter for metal solutions, barrel, 587874.
Filter, pump, Reissue 5804.

Filtering beer, 378379.
Filtering compound, 336385.
Filtering water, method of, 293740.
Finger nail clipper, 569903.
Finisher—see Tobacco.
Fire alarm box, non-interfering, 220088.
Fire alarm device, 173261.
Fire alarm, electric telegraph, 8891.
Fire alarm signal Reissue 8896.
Fire alarm signal box, 164425.
Fire alarm telegraph—see Electric telegraph.
Fire alarm, telegraphic, 178750.
Fire arch for furnace, 676606
Fire-arms, June 19, 1822, 12648, 12649, 15292, 30990, 37052, 119846, 126446, 205193, 3 Blatch. 545, Reissues 124, 1268, 3118, 3798, 3946. See also Breech.
Fire arms, breech loading, Reissue 3118.
Fire brick, 149589, 150854.
Fire cracker, 321833, 547921.
Fire door apparatus, thermostatic, 703347.
Fire engine, 1980. See also Relief-valve.
Fire engine, gong for, Reissue 6831.
Fire engine harness, 330320.
Fire engine pump, 42920
Fire engine, relief valve for steam, 42920, 45 F. 243.
Fire escape, 615999
Fire extinguisher, 205942, 218564, 248827, 489767, 511469, 515846, Reissue 4994.
Fire extinguisher, automatic, 233393, 307456, 318508, 357987, 415166, 14 App. D. C. 50.
Fire extinguisher, chemical, 147442.
Fire extinguishing apparatus, 216821.
Fire hydrant, 631545.
Fire kindler, 126347.
Fire-place, 14447.
Fire-place heater, 104376.
Fire proof—see Safes, Tiling.
Fire proof blind, 572014.
Fire proof ceiling, 285452.
Fire proof ceiling or wall, 555693.
Fire proof column, 154852, 191662, 199887.
Fire proof composition, Reissue 10419, 10420.
Fire proof fabric, 290837.
Fire proof floor and ceiling, 471772, 529724.
Fire proof floor construction, 550177.
Fire proof flooring, hollow tile, 112926.
Fire proof window, 600186.

Fire proof building material, 624828.
Fish—see Preserving.
Fish glue, 177764
Fish skins, gelatine from, Reissue 9296.
Fishing apparatus, 240630.
Fishing boat attachment, 456720.
Fixture—see Curtain, Gas, Shade, Spring, Toilet paper, Window.
Fixture, electric light, 248420, 259235, Reissue 11478.
Flags, method of making, 469395.
Flakes, granose, 558393.
Flambean, 233425.
Flanging machine, 227061.
Flasks for casting iron pipes, 37037.
Flavoring—see Tobacco.
Flax drawing machine, 95462.
Flexible—see Tube.
Floor—see Malt kiln.
Floor and ceiling, fire proof, 471772.
Floor and sidewalk construction, 320066.
Floor construction, fire proof, 550177.
Floor, fire proof, 112926, 529724.
Floor of mosaic, 87853.
Flooring, wooden, 531711.
Floral letter or design, 408416.
Flour—see Bolting, Middlings.
Flour, apparatus for sifting and sorting, Reissue 11252.
Flour bolter, 184821, 267098.
Flour dressing machine, 133898, 154770, 164050.
Flour manufacture, 162157. See also Bolting.
Flour, process of manufacturing, 137495.
Flower, artificial, 264308, 276430.
Flue construction for steam motor carriages, 658114.
Fluid level, 7263.
Flushing—see Water closet.
Fluting machine, Reissues 3000, 3001, 3856, 3861, 3938, 4349, 4653.
Fly book for anglers, 333384
Fly paper, method of making sticky, 278294.
Fly paper, sticky, 305118.
Fly trap, Reissues 6493, 6811.
Flying—see Target
Fodder shredder, 557727
Folding—see Trestle.
Folding bed—see Bed.
Folding chair, 96778, 221062, 5 F. 302.
Folding device for envelope machine, 648674, 672919.
Folding gate, 213119.
Folding guides, F. Cas. 18038.

Folding hanger for garments, 669561.
Folding machine for cuff blanks, etc., 645871.
Folding screen, 447461.
Food—see Infant.
Food chopper, 626212.
Foot board for boat, 231017.
Foot rest for chair, 668268.
Force feed—see Lubricator.
Forge, portable, 386771.
Forging machine for seamless pipes, 741301.
Forging metallic sockets, machine for, Reissue 6404.
Forging press, 264837.
Fork—see Hay, Spoon.
Fork, sluice, 23 How. 2.
Foundation strips, 25 F. 37.
Founding, steel, art of, 504361.
Foundry ladle, compartment, 553055.
Fountain—see Soda.
Fountain hose carriage, 183188.
Fountain pen, 232545. 237454, 260134, 267180, 291964, 293545, 307-735, 311554, 347961, 353162, 604690, 46 F. 71.
Frame—see Mattress, Satchel, Window.
Frame, door, 385233.
Frame, engine, 144818, 396209.
Frame, washboard, 223338, 255555.
Framing—see Timber.
Freight business system—see Business system.
Freight elebator, 257943.
Friction—see Match.
Friction clutch, 308872, 354242, 655440. See also Traction engine.
Friction drum, Reissue 9289.
Friction wheel for gearing, 100839.
Frilling and crimping textile materials, machine for, 37033.
Frog, railroad, Reissue 8914.
Fruit—see Preserving.
Fruit basket handle, 121054.
Fruit basket, stave, 313910.
Fruit drier, 190368, 195948, 221056. See also Drier.
Fruit drying apparatus, 172608.
Fruit jar, 97920, 102913, 131695.
Fruit paring machine, 114867, 232371. See also Apple.
Fruit press, 299815.
Fuel gas mixer, 499151.
Fuel, liquid, 102692.
Fuel, supplying locomotive, 99723.
Fuel, wet, furnace, Reissues 446, 4731.
Fumigating trees, process of, 445342.

FURNACE—GARMENT

Furnace, 71244, 89620, 104323, Reissues 3265, 7254. See also Blast, Lining, Regulator, Smelting.
Furnace, apparatus for charging and drawing, 394419, 408152.
Furnace, calcining, 559647, 640058.
Furnace damper, Reissue 4695.
Furnace, down-draft, 447179.
Furnace electric, 335058.
Furnace, fire-arch for, 676606.
Furnace for bagasse, 18874
Furnace for burning wet and offensive matter, 372305.
Furnace for heating glassware, 411131.
Furnace for heating links, 200394.
Furnace for ore, 1396, 117430.
Furnace for puddling, 135650, 153110.
Furnace for tobacco curing, Reissue 9108, F. Cas. 9609a.
Furnace for wet fuel, Reissues 446, 4731.
Furnace fuel feeder, Reissue 10942.
Furnace, hot-air, 414018.
Furnace, metallurgical, 411226.
Furnace, method of charging, 421797.
Furnace protecting lining, 358604.
Furnace, sheet-heating, 408475.
Furnace tuyere, 205744.
Furniture—see School.
Furniture caster, 190152, 273298, 318533, 342930, 345613.
Furniture joint, 415601.
Furniture nails, 370614.
Furniture spring, 98505, 122001.
Fur skins, machine for removing hairs from, 383258.
Fuses, magneto electric machine for firing, 201296.
Gaiters—see Shoe.
Galley, printer's, Reissue 6326.
Galvanic battery, 234413, 255597.
Galvanic battery, open circuit, 327878.
Game board, 602179, 666749.
Gang-edger, 227936, 258946, 290358, 445647, 640902.
Gang plow—see Plow.
Gang saw mill, 212526.
Gangway for ferry boat, supplemental, 308308.
Garment—see Under.
Garment, combination, 374307.
Garment fastener, 652407.
Garment, hanger for, 669561.
Garment hanger, accessible, 661947.
Garment stay, 378080, Reissue 11009.
Garment, under, 472555.

Gas—see Burner for, Incandescent, Lamp, Mantle, Oil burner, Stove, Tip.
Gas and electric lamp fixture, combined, 294697, Reissue 11544.
Gas, apparatus for enriching, 247925.
Gas burner, 282337, 299660. See also Acetylene, Burner.
Gas burner, incandescent, 673705.
Gas, chlorine, hydrating, 186860.
Gas engine, 430505, Reissue 11068. See Sparking plug for.
Gas engine, regulator for, 583585.
Gas fixture, carburetting attachment for, 333862.
Gas generating gas fixture, 606435.
Gas jets, electrical apparatus for lighting, 119561.
Gas lamp, 54 F. 163.
Gas lamp, appliance for using with incandescent, 423317.
Gas lighter, electric, 180832, 225071, 230590, 232304, 232661, 281345, 47 F. 583.
Gas, manufacture of, 167847.
Gas meter, proportional, 473544.
Gas mixer, fuel, 499151.
Gas pipe joint, 345463.
Gas, process of making, 330747, 341354.
Gas producer, Reissue 11523
Gas pump, 117925, 175020, 67 F. 535.
Gas retort, 36065.
Gas stove, 419827, 420225, 573205.
Gas tank for vessels, 283962.
Gasoline stove, 235600, 358284.
Gate, Reissue 2667.
Gate, caisson, 287178.
Gate, folding, 213119.
Gate, sluice, 1517.
Gate, starter's, for race course, 553740.
Gauge for forming artificial flower foundations, 276430.
Gauge, steam, registering, Reissue 4775.
Gauging cartridge machine, 208903.
Gear, wind mill, 85 F. 782.
Gearing, mill, 79528.
Gelatine capsules, machine for cutting, Reissues 10437, 10807.
Gelatine capsules, machine for making, Reissue 8440.
Gelatine from fish skins, Reissue 9296.
Generator—see Boiler.
Gilding machine, card, 290303, 363936.
Gin—see Cotton.
Glass—see Mold.
Glass annealing furnace, 258156.
Glass cutting tool, 91150.
Glass for jelly, 39027.

GLASS—GOVERNOR

Glass, machine for embedding wire netting in, 483020, 531570.
Glass manufacture, 9789.
Glass melting furnace, 261054.
Glass, method of making wire, 741125.
Glass ornamenting, 121119.
Glass plate, machine for labeling, 184933.
Glass polisher, plate, Reissue 10872.
Glass, process of embedding wire netting in, 483021.
Glass, process of chipping, 494999.
Glass, process of chipping or crystalizing, 405283.
Glass, process of decorating, 472230.
Glass, process of making art, 696392.
Glass scale pan, 214643.
Glass shade manufacture, 191224.
Glass vessel, incased, 195385, 208628.
Glass vessels, machine for grinding mouths of, 180584.
Glass, wire, 608096.
Glassware, 132208.
Glassware, apparatus for reheating and finishing, 442855.
Glassware, crimping device for, 327406.
Glassware, etching, 592920, 645333.
Glassware furnace, 411131.
Glassware, method of coloring, 382105.
Glassware, parti-colored, 282002.
Glassware, process of making, 260819.
Globe holder, Reissue 7286.
Glove, 39 F. 551.
Glove fastener, 141580, 155077, 251246, 260050, 281376, 290067, 297-980, 300508, 300509, 300510, 306021, 325688, 325699, 359614, 359615, 412296, 437161, 545906, 566731, 720616.
Glove, knitted, 462563.
Glove sewing machine, Reirsue 9586.
Glue, Reissue 4072.
Glue, fish, 177764, 351607.
Glue, process of making fish, 351607.
Glycerine, 11766.
Golf ball, 622834.
Gong bell, Reissue 10348.
Gong, engine house, 165438.
Gong for fire engine, Reissue 6831.
Gore or gusset, elastic, 238101.
Governor—see Music box, Steam engine.
Governor, electric heat and vapor, for spinning and weaving rooms, 222234.
Governor, elevator, 228107.
Governor for pneumatic motors, automatic, 473338.
Governor, steam engine, 308498, 358829.

Governor valve, 7755.
Grader—see Road.
Grain—see Harvester, Seed, Thrashing.
Grain and seed separators, recleaner for, 322465.
Grain band or bag tie, 135899.
Grain binder, 159506, 191264, 208137, 212420, 272598, Reissue 10106, 24 F. 90. See also Twine binder, Harvester.
Grain binder, cord holder for, 262883.
Grain bundling machine, 181664.
Grain cleaning, Reissue 10275.
Grain drill, 66578, 97317, 176719, 347982, 355462, 400947, 446230, 497864, 615727, 668397, 672596, Reissues 3976, 4091, 6274, 8589. See also Seed.
Grain drill, disc, 557868.
Grain drill, feed mechanism for, 157478.
Grain drill, press, 355716.
Grain elevator, 34992, 258042, Reissue 10521.
Grain separator, 41232, 167570, 343324, Reissues 540, 4383, 4793.
Grain thresher and cleaner, 542.
Graining machine, pail, 45590.
Graining wood, 164858
Gramophone, 372786, 534543, 108 F. 951, 115 F. 806. See also Phonograph.
Granose flakes, 558393.
Graphophone, 341214, 341288, 534543.
Grass cutting, 154900.
Grates, Reissue 9959.
Grate bars, 15 F. 344.
Grate, comb, 14 F. 42.
Grating, wire, Reissue 747.
Gravel separator, 126968.
Gravity and cable railroad, elevated, 367252.
Gravity pleasure railroad, 307942.
Gravity switch back railway, 332762.
Grinding—see Break, Tool.
Grinding glass vessel, 180584.
Grinding machine, drill, 411845, 425839, 664564.
Grinding mill, 188783, 213273, 359588, 382202. See also Roller.
Grinding needles, 172639.
Grip for cable car, 160757, 189204, 371599.
Grip for cable railway, 520259. See also Cable car grip.
Grist mill, Feb. 2, 1800.
Guard—see Cattle.
Guard, elevator, 648309.
Guard, life, for street cars, 454214.
Guard, oil, for electric fans, 537679.
Guides, folding, F. Cas. 18038.

GUM—HANGER

Gum, chewing, 111798.
Gums, artificial, 43009, Reissue 1904.
Gun, 87 F. 947 See also Breech, Magazine, Musket, Muzzle loader, Shell extractor.
Gun, breech loading, 434062.
Gun, breech loading rapid-fire, 613195.
Gun, heavy, rifling machine for, 318824.
Gun lock, Reissue 60
Gun, magazine, 295285, 295286.
Gun, magazine breech loading, 230823
Gunpowder, manufacture of, 429516.
Gusset, elastic, 238101.
Gutter, wood, Reissue 6675.
Gymnasium walking track, 358453.
Hair clipper, Reissue 11411.
Hair clipping machine, 382288.
Hair comb, 682448.
Hair crimper, 218300, 39 F. 273.
Hairs from pelts, machine for removing water, Reissue 11079.
Hair net, 124340.
Hair, process and compound for dyeing, 305057.
Hair, process of refining and bleaching, Reissue 8637.
Hair removing from fur skins, 383258.
Half-tone negative, 675272.
Halter ring, Reissue 1514.
Ham boiling wrapper, 624839.
Hame tug, Reissue 10981.
Hammock, 217964, 221754, 271510, 272311, 20 F. 501, 26 F. 450.
Hammock or bed bottom, 271510.
Hammock, art of making, 277161, 296460.
Hammock valance, 474997.
Hand car, Reissue 5274.
Hand hold on car seat back, 648927.
Hand stamp, 37175, Reissue 4675.
Handle—see Lock. Opera glass.
Handle, auger, Reissue 4187.
Handle, bicycle, 245071.
Handle, casket, 478168.
Handle, coffin, 559898.
Handle for crosscut saws, 78653.
Handle for fruit baskets, 121054
Handle, hollow, cutlery, 368051.
Handle, machine for rounding bent, 303116.
Handle, making hollow, 365829.
Handle, satchel, 314724.
Handle socket for shovel, 208258.
Hanger—see Trousers.

Hanger, door, 369451, 422305, 455695, Reissue 7795.
Hanger for garments, folding, 669561.
Hanger, garment, 661947.
Hardening armor plate, 460262.
Harmonica, 628640.
Harness, 171190. See also Loom, Saddle.
Harness buckle, Reissue 8829.
Harness cruppers, making, 238446.
Harness, fire engine, 330320.
Harness hook, 47764.
Harness, India rubber coated, 137873.
Harness, loom for making French, 289872.
Harness mounting, 122163, 167040.
Harness pad, 302548, 402719, 423797.
Harness terret, 207791.
Harness trimming, covering, 99032.
Harness trimmings, manufacture of rubber coated, Reissue 5155.
Harness trimmings, rubber coated, Reissue 5156.
Harness, weaver's, Reissue 5282.
Harrow, 82451, 120195, 153225, 178461, 256619, 415113, Reissues 6606, 9148, 33 F. 352.
Harrow, clip for spring tooth, 388306.
Harrow, disk, 301729, 369163, 416346, 418199, 645818.
Harrow, roller spring tooth, 329371.
Harrow, spring tooth, 201946. 224273, 244100, 444248, 522435, 51 F. 819.
Harrow tooth, 28 F. 97.
Harrow, wheel, Reissue 8765.
Harvester, June 21, 1834, 2488, 3895, 5335, 9005, 9737, 10459, 17990, 51364, 74342, 75383, 154595, 176402, 193770, 223812, 233035, 298249, Reissues 72, 239, 305, 331, 449, 545, 723, 724, 742, 875, 877, 878, 879, 985, 986, 1003, 1110, 1177, 1211, 1262, 1682, 1683, 2224, 2354, 2490, 2608, 2610, 2632, 3372, 3460, 4281, 4484, 4672, 4673, 6609, 9276, F. Cas. 5668, F. Cas 9855, 55 F. 288, 56 F. 918. See also Twine binder.
Harvester, bean, 364603
Harvester binder, grain adjuster for, 266949.
Harvester, bundle compressor for, 266913.
Harvester, grain binding, 77878.
Harvester, knotter for, 278639, 301190.
Harvester, platform adjuster for, 251147.
Harvester, rake and reel for, Reissue 2951.
Harvester, sheaf carrier and dumper for, 456825.
Harvester, sheaf carrier for self binder, 405892, 482931.
Hat, 1503, 34043, 74392, 185716, 219462. See also Bonnet.
Hat and cap, 345965.

HAT—HEEL

Hat bodies, Aug. 11, 1821.
Hat bodies, machine for felting, 251470, 344166.
Hat bodies, machine for making, 11805, Reissues 396, 1086, 1087, 2942.
Hat bodies, manufacture, 9484, 9700.
Hat bodies, pouncing machine, 57232.
Hat bodies, stretching machine, Reissue 3217.
Hat box or trunk, 573789.
Hat brims, curling, 30379.
Hat lining, sewing machine for, 53927.
Hat, fabric for, Reissue 2587.
Hat, machine for felting, 263075, 263076, 280095, 297471, 302055, 393-866.
Hat, machine for pouncing, 97178, 220889.
Hat machinery, 14845.
Hat packing ring, 574894.
Hat rack, 56569.
Hat sweat appliance, 46 F. 106.
Hay—see Baling.
Hay and cotton press, portable, 199052.
Hay and grain elevator, 152760.
Hay carrier, 271276.
Hay carrier, adjustable stop device for, 490738.
Hay carrier apparatus, 444546, 526839, 539524.
Hay carrier elevating pulley, 434544.
Hay carrier track, 493216.
Hay elevator, 53345, 317109, Reissues 1869, 1871, 2260, 2429.
Hay elevator and carrier, 279889, 300687, 345229.
Hay elevator track, 287772, 395714, 69 F. 405.
Hay fork, horse, 197137, 210458.
Hay knife, 112400, Reissue 10072.
Hay loader, 659382.
Hay, method of baling short-cut, 340769.
Hay press, Reissues 8130, 8292, 8296, 127 F. 363. See Cotton, Hay.
Hay rake, 259550.
Hay sling, 393940.
Hay tedder, 198410.
Head light, locomotive, 235924, 262169,
Heat, generating and applying, Reissue 67.
Heater—see Car, Feed water, Steam, Water.
Heater and feeder for steam boiler, 187825.
Heater, fireplace, 104376.
Heating apparatus, 208376, 447023.
Heating apparatus, electric, 464247.
Hedges, plashed, 254085.
Heel—see Shoe.
Heel cushion for shoes, 792688.

Heel plates, die for securing to rubber shoes, 296623.
Heel plates, machine for attaching, 369554.
Heel plates, securing to rubber shoes, 296624.
Heel stiffener, blank for, 180340.
Heel stiffener, machine for making, 132849, 350907. See Boot, Shoe.
Heel trimming machine, 220920.
Hernial truss, 22 F. 827.
Hide, drier for, 184352.
Hide of leather, automatically measuring, 194662, Reissue 9204.
Hide, machine for shaving, 383914.
Hide, process for tawing, 291784, 291785.
Hide, raw, stretching, 213323.
Hide, raw, treating, 149954, 172346.
Hide, treating, 200078, 210797.
Hinge—see Shutter.
Hinge, box, 378861.
Hinge, last, 590873.
Hinge, school seat, 416660, 531686.
Hitching devices, clasp for, 161757.
Hod—see Coal.
Hod elevator, 95262, 231021, 24 F. 182.
Hoe, 189220.
Hog ring, implement for applying, 130853.
Hoisting—see Elevator.
Hoisting and conveying machine, 300690, 524502.
Hoisting and loading machine, 401618.
Hoisting apparatus, brake for, 44740.
Hoisting apparatus, steam, 47773.
Hoisting drum, friction, 34 F. 541.
Hoisting machine, 78829.
Hoistway cover controller, 278528.
Holder—see Roll paper, Sales, Sand paper, Shade, Shoe button, Spinning, Ticket, Toilet paper.
Holder, die, Reissue 9123
Holder, eyeglass, 175821.
Holder, file, Reissue 4864.
Holder, globe, Reissue 7286.
Hollow handles, 365829.
Hollow spheroidal bodies, method of forming from sheet metal tubes, 378412.
Hominy machine, 24104.
Hominy mill, 57605, 247882, Reissue 10057.
Honey, artificial, 17264.
Honey comb foundation, artificial, Reissue 8962.
Honey frame, 243674
Hoof pad for horses, 646148.
Hook, Dec. 2, 1834, 411857. See Lacing, Snap.

HOOK—HULLING

Hook attachment for musket, 149141, Reissue 6021.
Hook, garment, 462473.
Hook, harness, 47764.
Hook, machine for feeding and setting lacing, 309166.
Hook, self-mousing, Reissue 2166.
Hook, swivel, 452320.
Hoop—see Barrel.
Hoop, cheese, 122520, Reissue 8832.
Hoop coupling, tank, lug for, 477174.
Hoop skirt, 20681, 105124, 116411, Reissues 501, 870, 2046.
Hoop skirt spring, 74672.
Hopper boy, Dec. 8, 1790.
Horn composition, 98727.
Horse car coupling, Reissue 906.
Horse collar, 157367, 507209, 689273.
Horse collar, casing for, 699151.
Horse collar pad, 89646, 259700, 267011. See Shoulder pad.
Horse collar, pad fastening for, 298626.
Horse collar, sweat pad for, 331813, 353913.
Horse power, 4595, Reissue 1322.
Horse shoe, 170809.
Horseshoe calk, 666583.
Horseshoe machine, 17665.
Horseshoe nail machine, 139332, 177237.
Horseshoe nails, machine for finishing, 162789, 172660.
Horseshoe nails, finishing, Reissue 5207.
Horses, interfering device for, 379644.
Hose carriage, fountain, Reissue 10047.
Hose coupling, 23033, 34476, 64437, 68656, Reissue 3768.
Hose coupling for railway cars, 363553.
Hose couplings, implement for applying straps, 197717.
Hose, elastic, 174771.
Hose, fountain, carriage, 183188.
Hose pipe, F. Cas. 3332.
Hose supporter, 552470, 629391, 638540.
Hose to coupling, strap for securing, 197716.
Hot air engine, Reissue 9414.
Hot air furnace, 245158, 414018.
Hot air pumping engine, 43 F. 76.
Hotel register, 63889, 63924.
House drainage, 235754.
Hub, 148973, 651276, Reissues 5366, 8868, 12203.
Hub, vehicle, 651276.
Hub, wheel, band shell for, 480093.
Hub, securing metal spokes to, 550815.
Huller for clover, 35209, 188064, Reissue 1299. See also Clover.
Hulling—see Peas.

Hulling green peas, machine for, 387318.
Hulling peas, method of, 421244.
Hulls, separating—see Cotton seed.
Hydrant, Reissues 3434, 6990.
Hydrant casing. 96959, Reissues 4887, 10452.
Hydrant, fire, 631545.
Hydrating chlorine gas, 186860.
Hydraulic—see Dredging, Elevator, Jack.
Hydraulic excavator, 372956.
Hydraulic jack, 137765.
Hydraulic mining apparatus, Reissue 5193, 8876.
Hydraulic power accumulator, 202660.
Hydrocarbon—see Burner, Burning.
Hydrocarbon burner, 365789.
Hydrocarbon furnace, 304365.
Hydrocarbon oils, 90284
Hydrogen peroxide, method of making, 273569.
Ice chipping tool, 296501.
Ice cream, packing, 113239.
Ice creeper, 192057.
Ice cutting apparatus, March 18, 1829.
Ice machine, 148675, 228344.
Ice pitcher, 18546, 21717.
Ice planer, 367267
Incandescent—see Electric, Lamp, Mantle, Reflector.
Incandescent burner and method of using the same, 447757.
Incandescent electric lamp, 223898, 227229, 265311, 293552, 298658.
Incandescent electric lamp, filament for, 369280.
Incandescent electric lamp, method of treating carbons for, 265777.
Incandescent gas burner, 673705.
Incandescent gas lamp, 423317.
Incandescent lamp carbons, method of manufacturing, 323372.
Incandescent lamp filaments, process of making, 211262, 306980.
Incubator, 267422, 368249.
Incubator and brooder, 586088.
Incubator egg tray, 258295.
Incubator, regulator for, 210559.
Index, book, 383543.
Index, card, 623857, 624597.
Index for books, general, 461787.
Index for paper files, 331259.
India rubber, 16, 3633, Reissues 556, 557, 1085, F. Cas. 11932. See also Rubber.
India rubber boots, 178896, 196778.
India rubber, coating articles with, 215034.
India rubber coated harness, 137873.
India rubber, dental, 58901.

INDIA—JACK

India rubber eraser, 19783, 66938, 167455, 233511.
India rubber flocking machine, Reissue 4937.
India rubber manufacture, Reissue 3531.
India rubber, shirred fabric, 3461.
India rubber overshoes, 103594, Reissue 4977, F. Cas. 2968.
Indicators—see Cash.
Indicator for weighing apparatus, 387285.
Induction coil, 371524.
Induction coil and circuit breaker, Reissue 4588.
Infant's food, process for making, 278967.
Injector, 614752.
Injector, double tube, 604233.
Injector for boiler, 57057, 86152, 92718, 185861.
Ink, 7686, Reissue 3576, 437588.
Ink, printer's, Reissue 2805.
Inkstand, 399844, 413390, 491460, 605177.
Inkstand, fountain, 428753.
Ink well, 661334.
Insect protector, 233574.
Insole for slippers, 525746.
Insulated electric conductor, 272660.
Insulated electric conduit, 564174.
Insulating turn buckle—see Trolley.
Insulator—see Mica.
Insulator, electrical petticoat, 600475.
Insulators of glass, press for making screw, 723589.
Insulator pin, 493434.
Insulator, press for making screw, 532973, 542565.
Insulator, supporting pin for electric, 297699.
Interchangeable ring, 389778.
Interfering device for horses, 379644.
Interrupter, electric, 714020.
Invalid chair, 173071.
Iron—see Wrought iron.
Iron, bronzing, Reissues 2355, 2356.
Iron building construction, 383170.
Iron manufacture, 25235, 143600.
Iron, manufacture of wrought, 11838.
Iron ware, enameled, Reissue 7779.
Iron ware, enameling, 279094.
Ironing—see Collar.
Ironing machine, edge, 660277, 678949.
Ironing machine for edges of collars and cuffs, Reissue 11664.
Ironing, shirt, 40 F. 644.
Isinglass manufacture, 134690.
Ivory, artificial, 89531, 90443, Reissue 5940.
Jack—see Hydrauclic.

Jack, hydraulic, 297975.
Jack, lifting, 310973, 312316, 455993, 455994, 455995, 511923, 527102.
Jack, wagon, 463599.
Jacquard—see Loom.
Jail, 24307, 26500, 27222, 29282. See Prison.
Jail door fastening, 26108,
Jar, 483033.
Jar, cap for preserve, 117236.
Jar closure, 483033.
Jar, drilling, 78958.
Jar, fruit, 97920, 102913, 131695.
Jar, glass, mold for, 416389.
Jar, sealing disk for, 408177.
Jelly glass, 39027.
Jewelers' use, process of making compound ingots for seamless plated wire for, 381527.
Joint, clapboard, Reissue 3268.
Joint, cement, tool for dressing, 334125.
Joint, furniture, 415601.
Joint, gas pipe, 345463.
Journal bearing, 417340.
Journal box, anti friction, 197289.
Jump seat, 300847.
Jumper, baby, 79534, 138209.
Kalsomine, 161591.
Keel, box, for ship, 367828.
Keelson, ship's, 393713.
Keg, filling with beer, 331251, 331252, 333081.
Ketone, aromatic, 556943.
Kettle—see Brass.
Kettle, bail for, 338506.
Kettle, tea, 226668
Key—see Lock; Telegraph.
Key opening can, 543347.
Keyboard for musicians, exercising, 479339.
Kiln—see Malt.
Kiln, brick, 471769.
Kiln, drying, 629202.
Kiln for lime, 9736, 18635.
Kiln or dry house, 22 F. 101.
Kindler, fire, 126347.
Kindling wood, packing, 93775.
Kinetographic camera, 589168, Reissue 12037
Knife—see Hay.
Knife blade, machine for burnishing, 241750.
Knife for cutting wooden disk blanks, 322017.
Knife for removing corn, 51379.

Knife, hay, Reissue 10072.
Knit cap and art of making same, flat, 669011.
Knit fabric, 160684.
Knit goods, method of uniting, 167492.
Knitted fabric, 374888.
Knitted gloves, 462563.
Knitting machine, 9435, 9718, 9719, 68595, 99425, 99426, 102529, 105-187, 123687, 140635, 162886, 218460, 333102, 453290, Reissues 963, 6423, 6424, 7368.
Knitting machine, burr for, 240008, Reissue 8391.
Knitting machine, burr wheel for, 424314.
Knitting machine, circular, 296210, 363528, 461357, 523111, 570059, 581887, 592134, 656535.
Knitting machine, fashioning device for circular, 521218.
Knitting machine, loop holding mechanism for, 445494.
Knitting machine, rib, 500151, 561559.
Knitting machine, straight, 557641
Knitting machine, thickening thread and take up mechanism for, 600-761.
Knitting machine, thread feeding mechanism for, 600788.
Knitting machine, warp, 395077, 397140.
Knitting machine, web holder for, 510934.
Knitting needle, 6025.
Knitting needle manufacture, Reissue 1821.
Knobs, door, 2197, 318684, 327820.
Knob, sheet metal, 432583.
Knotter—see Harvester.
Label—see Tobacco.
Labeling glass plate, 184933.
Lace purling, 218032.
Lacing hook, 259597, 19 F. 602.
Lacing hook stock, 232561, 19 F. 602.
Lacing hooks, machine for feeding and setting, 255076.
Lacing stud or eyelet, 525152.
Lacing studs, machine for, 93 F. 200.
Lacteal instrument, 22018.
Ladle, compartment foundry, 553055.
Ladder, store service, 442531.
Lamp, 12550, 28762, 29221, 49984, 50591, 57245, 65230, 73012, 86549, 89770, 99443, 184855, 206061, 384969, 613648, Reissues 648, 2765, 3082, 6844, 8598, 8611. See also Arc, Electric, Incandescent, Oil, Reflector.
Lamp, arc, circuit controller for, 502535.
Lamp black, 3824.
Lamp black machine, automatic, 601389.
Lamp bulb, process of exhausting, 726293.
Lamp burner, 289571, 316422.

Lamp cap, 11928.
Lamp, car, 329718.
Lamp chimney, 652730, Reissues 7069, 7659, 7417.
Lamp, electric, circuit breaker for, 247103.
Lamp, electric hand, 617592.
Lamp fixture, Reissue 7628. See also Gas, Electric.
Lamp for locomotive, Reissue 2133.
Lamp, gas, 54 F. 163. See also Mantle.
Lamp, incandescent, 317676, 353783, 434153.
Lamp, incandescent electric, 257277, 485478, 497038.
Lamp, incandescent electric, filament for, 369280.
Lamp, incandescent gas, 409530, 423317.
Lamp lighter, electric, 492913.
Lamp shade holder, Reissues 7511, 10087.
Lamp shell, mechanical, 234916.
Lamp socket, incandescent, 559232, 626927.
Lamp socket, incandescent electric, 251596.
Lamp socket, insulating lining and process of making same for incandescent, 718378.
Lamp stove, Reissue 11383.
Lamp, street, 791355.
Lamp, street, removable oil chamber for, 222856.
Lamp, wick adjuster for central draft, 477865.
Lamp wick raiser, 348969.
Lantern, 13286, 47551, 63480, 104318, 151703, 244944, 246774, 413-464, Reissues 325, 3747, 9422, 7 F. 208.
Lantern holder, 415720.
Lantern, tubular, 287932, 450444, 26 F. 765.
Lantern wick raiser for, 476506.
Lappet—see Loom.
Lard, apparatus for rendering, Reissue 5925.
Last, 388830, 395668. See Boot, Shoe.
Last, boot or shoe, 443199, 519067.
Last, divided, 645906.
Last hinge, 590873.
Lasting and fastening machine, 248544.
Lasting machine, boot, 197607
Latch, Reissue 3909. See also Lock, Satchel.
Lath machine, 146632.
Lathe, Sept. 6, 1819, Jan. 20, 1820, 16936, 23957, 29534, 127211, Reissues 1400, 5487, 7262.
Lathe chuck, 19786.
Lathe, feed mechanism for screw cutting, 470591.
Lathe for turning irregular forms, 23957.
Lathe, tool holder for, 272304.
Laundry dampening machine, Reissue 11727.
Lawn mower, ratchet mechanism for, 383829, 497467.

Lawn sprinkler, 148596, 203069, 461415, 510496.
Lead—see Pencil, Trap.
Lead pencil, 554212.
Lead pipe, Reissue 3744.
Lead pipe machine, 5253, Reissue 82.
Lead press, hydraulic, 346563.
Leads, printer's, machine for cutting, 206781.
Leather, May 8, 1809, Reissue 3816, 40 F.156. See also Sweat, Tube.
Leather, bronzing, 83925.
Leather, crimping and folding, 143783.
Leather cutting machine, 368108.
Leather cutting press, 101931.
Leather, machine for forming staple seams in, 136340.
Leather of old card clothing, utilizing, 177466.
Leather ornamenting, 42136.
Leather, rendering flexible, Reissue 8186.
Leather scraps, machine for making balls of, 216305.
Leather skiving machine, 200682, 220906, 273931.
Leather, splitting, 29649, 191400.
Leather stuffing and fulling machine, 177576.
Leather trimming machine, 380296.
Leaves—see Tobacco.
Ledger, perpetual, 568251, 581123.
Leg, artificial, 644464.
Lemon juice extractor, 415048, 644736.
Lemon squeezer, 217519.
Letter and figure, 265061.
Letter block, 59603.
Letter box, street, 88528, 462224. See also Mail.
Letter file, 9776, 198968, 217907, 254847, 282275. See also Paper file.
Letter, floral, 408416.
Letter, method of producing imitation press copied, 423558.
Letter stamp, Reissue 4143.
Level, fluid, 7263.
Level, pendulum, 17023.
Lever, compound, July 2, 1836.
Lid for car axle box, 423795, 521231.
Lifting jack, 154989, 210946, 245634. See also Jack.
Lifting jack, lever, 168663, 172471.
Light, electric, 119561, 196425, 317676, 321749, Reissue 9743, 20 F. 502.
Lighter—see Cigar.
Lighter, pocket, Reissue 8490.
Lightning arrester, 401085, 438788.
Lightning rod, 112137.
Lightning rod machine, 25534.
Limb—see Leg.

Lime—see Kiln.
Lime, process of slaking, 678500.
Lining, furnace mouth, 421588.
Link—see Chain.
Links, furnace for heating, 200394.
Linoleum floor cloth, process of manufacturing, 412279.
Linotype machine, 313224, 317828, 345525.
Lint cotton, mechanism for handling, 308787.
Liquid fuel, 102662.
Liquor cabinet, 537434.
Loader—see Hay, Log.
Loading—see Hoisting.
Loading cartridge machine, 97904, 464883.
Lock, 30140, 72946, 295270, 373107, Reissue 1470, F. Cas. 5783, 26 F. 102. See also Padlock, Permutation, Time, Trunk.
Lock and handle for traveling bag, combined, 195233.
Lock and key, 234002.
Lock and latch, 180287.
Lock, bolt, 283725.
Lock, cabinet, 316411, Reissue 10361.
Lock case, 262977.
Lock, combination, Reissue 4696.
Lock, combined time and combination, 677363.
Lock cylinders, 234213.
Lock for door, Reissues 401, 1390.
Lock for door keeper, 16676.
Lock for drawers, 138148.
Lock for satchel, 208541.
Lock for safes and vaults, Reissue 8550.
Lock, gun, Reissue 60.
Lock, keeper plate for, 309238.
Lock, knob locking and releasing mechanism for, 315186.
Lock, permutation, Reissues 4488, 4696.
Lock rod for cards, 628886.
Lock, time, 173366, 186369, 262094, Reissues 7947, 8550.
Lock, valve, 413794.
Locking and unlocking mechanism for electric locks, 323918.
Locking device for elevator, 555825.
Locomotive—see Headlight, Lamp, Spark arrester, Truck.
Locomotive axle—see Axle.
Locomotive, axle bearing for, 22439.
Locomotive, electric, 546560, 554353.
Locomotive, method of supplying with coal, Reissue 10417.
Locomotive tender, method of supplying with fuel and water, 99723.
Locomotive valve and cylinder lubricator, 645026.
Locomotive wheel, 58447.
Log—see Saw.

LOG—MAIL

Log carriage for saw mills, 279537.
Log, machine for rolling saw, Reissue 5487.
Log, ship's, Reissue 10625.
Log turner and loader. 583560.
Logwood, process of making coloring matter from, 491972.
Loom, Apr. 30, 1829, July 15, 1829, 491, 3987, 6806, 63353, 130961, Reissues 247, 947. See also Shuttle.
Loom, circular, 361994.
Loom for making French harness, 289872.
Loom, harness, machine for making, Reissues 4509, 4510.
Loom, Jacquard, 185027.
Loom, lappet, 570259, 570260.
Loom, picker staff motion, Reissue 2626.
Loom, power, 418349.
Loom shedding, mechanism for, Reissue 5718.
Loom shuttle, 372239.
Loom, shuttle box, mechanism for, Reissue 6567.
Loom shuttle, self-threading, 528550
Loom, take up mechanism for, Reissues 5150, 8298.
Loom, warp stop motion for, 595688.
Loop, box, 216256, Reissue 6974.
Lubricant, 79279, 111881, 138243, 187964, 191171, 219455, 233497, 283931, Reissues 5328, 7321, 8740,
Lubricated bearing, 622247.
Lubricating—see Wool.
Lubricating device for steam engines, 400682, Reissue 11730.
Lubricating oil, determining grade of, 174506.
Lubricator, 107478, 196650, 255353, 257326, 337500, 357931, 32 F.625, 47 F. 522, 48 F. 169.
Lubricator attachment, 267430.
Lubricator for axle, 242141.
Lubricator for car axles, 365754.
Lubricator for steam engines, automatic, 318168.
Lubricator, force feed, 590297.
Lubricator, locomotive valve and cylinder, 645026.
Lubricator, self feeding, 106150.
Lubricator, steam engine, 214589, 397293, 398583.
Lubricator, steam engine cross head, 321726.
Lug for tank hoop coupling, 477174.
Lumber drier, 79661, 189432, 535982, Reissues 8840, 8846, 9309.
Lustering—see Silk
Magazine fire arm, 316401.
Magazine gun, 230823, 295285, 295286, 400679, 584177.
Magneto electric machine, 120057, 342504, 20 F. 112.
Magneto electric machine for firing fuses, 201296.
Mail—see Letter.
Mail bag, 171250.

Mail box, 94449.
Mail stamping apparatus. 341380, 388366.
Main for water distribution, 312158.
Malt kiln, 226890.
Malt kiln floor, 483781.
Malt liquor, art of brewing, 262761.
Maltha coated water-proof paper, 378520.
Mangle, 204701, 253661.
Manhole cover, 446151.
Manhole cover for boiler, 339998.
Manifold copying sales book, Reissue 10359.
Manifolding—see Sales, Typewriting.
Manifolding composition, 348072.
Mantel, 389340, 409596.
Mantle, gas lamp, 97 F. 950.
Mantle, production of incandescent, 407963.
Mantle supporting device, 781613.
Map case, 343060.
Marine railway, 41452.
Marking—see Tobacco.
Marking wheel, Reissue 6714.
Martingale ring, 37941.
Mash rake, 207283.
Mask, base ball, 200358.
Massage apparatus, 481359.
Mat, 19347.
Mat, picture, material for, 452911.
Mat, woven wire, 399554.
Match safe, 571121.
Match, 68.
Match, apparatus for dipping, 313064.
Match book, friction, 483166.
Match box, 63104.
Match machine, 606994.
Match making machine, 281408, 292474, 389435.
Mattress, 322366. See Bed bottom.
Mattress fabric, woven wire, 109446.
Mattress frame, 615073.
Mattress frame, metallic, 549370.
Mattress, spring, Reissue 2092.
Mattress supporting frame, 251630.
Mattress stuffing machine, 376399, 399093.
Mattress, treating moss for, 16961.
Mattress, woven wire, 399867.
Meal, cooling and drying, Reissue 4712
Measure—see Tape.
Measurement—see Recording.

MEASURING—MILL

Measuring apparatus, electrical, 392387.
Measuring instrument, electrical, 470340, 19 App. D. C. 373.
Measuring machine, cloth, 507300.
Meat—see Preserving.
Meat chopper, 271398.
Meat mincer, Reissue 10717.
Meat tree, 688674.
Mechanical movement, 70063, 228779, 304549, 304550, 583308.
Mechanical movement for washing machine, 606044, 608220, 736285.
Medallion—see Tile.
Medical compound, 391875, 14 F. 740.
Medicine case, 526486.
Melodeon, 16094.
Melting glass, furnace, 261054.
Metal articles, method of making irregular shaped, 419292.
Metal, coating with, 57271.
Metal, cooling and drying, 9 F. 556.
Metal, expanded, 527242.
Metal from solution, process of recovering precious, 607719.
Metal, punching and stamping, 131004.
Metal working, 378412.
Metallic covering for buildings, 177986.
Metallic seams, tool for making, F. Cas. 2353.
Metallurgical furnace, 411226.
Meter—see Water.
Meter, direct current, 698653.
Meter, electric, 550823, 604465.
Meter, gas, 473544.
Meter, spirit, F. Cas. 10380.
Meter, water, Reissues 10778, 10806.
Mica forms or insulators, molding, 483653.
Mica sheets, artificial, 483646.
Middlings purifier, 158992, 187923, 194539, 208936. 236101, 258142, Reissues 302, 1280, 8386.
Mileage—see Ticket.
Milk can, 207822, 321340, 607433, Reissue 9811. See also Cream.
Milk cooler, 471974.
Milk cooling can, 59993.
Milk, cream from, 187516.
Milk pan, 219910.
Milk, process of treating, 295180.
Milk separator, centrifugal, Reissue 11311.
Milk tester, centrifugal, 484685.
Milk testing apparatus, centrifugal, 458194.
Mill—see Wind, Roller, Rolling, Saw.
Mill, coffee, Reissues 7583, 8866.
Mill, fanning, 267032.

Mill for grinding bark, 1714.
Mill gearing, 79528.
Mill, grinding, 188783, 213273, 359588, 382202.
Mill, grist, Feb. 2, 1800.
Mill, pulverizing, 410757. See Crusher, Ore crusher.
Mill, smut, Reissue 3794.
Millstone, balancing. Reissue 786.
Millstone, dressing, 38670, 73524.
Millstone, grinding, 397.
Mimeograph, 126 F. 966.
Mince pie compound, 268972.
Mineral water, 193476.
Mineral wool, process of manufacturing, 447360, 452733.
Mining—see Coal, Hydraulic.
Mining machine, 335328, 432754.
Mirror, 92942, 182633, 246270.
Mirror mounting, 631033.
Miter machine, Reissues 3445, 11062.
Mitt shaping machine, process and article, 234286.
Mold—see Cigar, Tooth crown, Type.
Mold, black washing, 142661.
Mold for bottles, 22129.
Mold for buttons of metal, May 14, 1812.
Mold for casting car wheels, 594285.
Mold for cigar, Reissue 6662.
Mold for glass goblets, 68633.
Mold for ingots, 99299, 166700.
Mold for making mortar pipes, 196295.
Mold for rubber pencil head, 31187.
Mold for shade holder, 191102, 191103.
Mold for tubular articles, 410285, 465771.
Molding—see Pipe, Sheet metal, Trunk, Wall coping.
Molding and casting, 53883.
Molding crucible pots, Reissue 4608.
Molding earthenware, 474496.
Molding, enameling, 163825.
Molding machine, 10204.
Molding, machine for enameling, 226845
Molding, machine for making wood, Reissue 243.
Molding manufacture, Reissue 187.
Molding, metal, and apparatus for making same, Reissue 7609.
Molding tubes or cylinders, machine for, 397860.
Molten pig metal, method of mixing, 404414.
Mop head, 67643, Reissues 3682, 9247.
Mop stick, 499402.
Morris chair, 667162, 678219.

Morris chair, support for back, Reissue 11919.
Mortising machine, 10422.
Mosaic floor, 87853.
Moss, treating for mattress, 16961.
Motion picture exhibiting apparatus, 586953.
Motor, electric, 463704,
Motor—see Alternating current, Electric. Electro magnetic, Railroad, Regulator, Switch, Truck.
Motor, alternating current, 428650, 430328, 553469.
Motor and brake, electric, 736461.
Motor and dynamo, electric, 393266.
Motor bearing, 622247.
Motor cars, contact arm for, 408638.
Motor, electric—see Contact, Controller.
Motor, electric, cut out for, 565867.
Motor, electric railway, 470817.
Motor, electro magnetic, 416193
Motor for mechanical musical instrument, 357933.
Motor or generator, electric, 631518.
Motor, water, 146120.
Mould—see Mold.
Mounting, harness, 122163, 167040.
Movable dam, 268411, 46 F. 486.
Movement, clock, Reissue 10062.
Mower, 9737, 51364, Reissues 3460, 4484, 25 App. D. C. 313. See also Harvester.
Muffler, exhaust steam, 209939.
Muffler for safety valve, 297066.
Muffler, noise, 228744.
Municipal—see Signal.
Music box, 161055, 474520, 500371, 569233, 596393.
Music box, automatic, 621025.
Music box, damping device for, 500369, 500370.
Music box, governor for, 500372.
Music box, note plate for, 500374.
Music box, star wheel standard for, 577835.
Music desk for piano, 468077.
Music sheet, perforated, 552796.
Musical instrument—see Melodeon.
Musical instrument, automatic, 290697.
Musical instrument, mechanical, 356690.
Musical instrument, motor for mechanical, 357933.
Musical instrument, pneumatic regulator for, 659442.
Musician's key board, 479339.
Musk, artificial, 451847.
Musk, process of producing artificial, 416710.
Musket, hook attachment for, 149141, Reissue 6021.

Muzzle loaders into breech loaders, method of transforming, 20503.
Nail, Feb. 14, 1799, Feb. 22, 1807, Feb. 8, 1811, 90902, 92355, 164-889, Reissue 5207. See Horseshoe.
Nail extractor, Reissue 5502.
Nail, furniture, 248269, 370614.
Nail, making furniture, 270239.
Nailing—see Shoe.
Nailing machine, 38924, 163474, 184281, 283228, 308370, Reissue 7014.
Nailing machine, box, 276639, 342268.
Naphthaline paper, 397259.
Napping cloth, machine for, 377151.
Napthol black color compound, 345901.
Neck protector, 593954.
Neck scarf, 54 F. 528.
Necklace, chain for, Reissue 5774.
Necktie, Reissue 7909.
Neckwear supporter and fastener, 719814.
Needle—see Knitting.
Needle, grinding, 172639.
Needle, sewing machine, 110594.
Negative, half tone, 675272.
Neostyle, rotary, 584787.
Net, dip, 245251.
Net, hair, 124340.
Newspaper wrapper, 558244.
Nickel, electro deposition of, 93157, 102748, 113612.
Nippers—see Pliers.
Nippers, cutting, 329133.
Nippers, police, 152182.
Nitro cellulose—see Pyroxiline.
Nitroglycerine, Reissues 4818, 4819, 5798, 5800. See also Dynamite.
Noise muffler, 228744,
Nose guard for spectacles, cork, 329474.
Nose piece for eye glasses, 695681.
Numbering hand stamp, 462065.
Numbering machine, automatic typographic, 676084.
Numbering machine, consecutive, 166681.
Numbering machine, typographic, 721276.
Nut and washer machine, Reissue 313.
Nut lock, 44 F. 612.
Nut machine, 21551.
Nut manufacture, 13118.
Nut, sleeve, 236723.
Nuts, Reissue 666.
Nuts, process of treating, 407684.
Oar, 231016.

Oil, 38015, 63229, 90284, 102662, 174506. See also Can, Filler, Hydrocarbon, Lubricating, Petroleum, Stove.
Oil and sprinkling can, 247855.
Oil, apparatus for purifying and refining, 411646.
Oil barrel—see Barrel.
Oil burner, 424964, 475401, 617291. See Burning.
Oil can, 387426.
Oil can and filler, 420812.
Oil can, non overflow and filler, 515124.
Oil can, safety, 521614.
Oil car, 216506.
Oil cloth—see Linoleum.
Oil cup, Reissue 4361.
Oil distilling—see Tub.
Oil guard for electric fan, 537679.
Oil meal, combined cooker and cake former for, 421454.
Oil meal, cooking, 308112.
Oil, process of extracting, 434696.
Oil pump, 47133, 50919.
Oil pumping apparatus, device for converting motion in, 328099.
Oil pump, transmitter of motion for, 332318.
Oil stove, 85373, 96249, 221206, 230850.
Oil stove burner, 702560.
Oil stove holder, 102218.
Oil tank for street lamps, 286211.
Oil well, 45647. See also Drill, Packer, Packing, Pump.
Oil well, increasing capacity of, Reissue 6258.
Oil well tools, wrench for, 422879.
Oleaginous seed, treating, 168164.
Omnibus step, 8119.
Onyx from pyroxilin compounds, imitation, 546360.
Opera glass handle, 268112.
Opera glass holder, 399543.
Order holder, 273301
Ordnance, 32983, 32984, 32985, Reissue 1272. See also Cannon, Shell extractor, Trunnion bearings.
Ordnance, breech loading, 468331, 544637, 599482.
Ordnance lock, 233142.
Ore—see Roasting, Smelting, Stone.
Ore, calcining, apparatus for, 46287.
Ore concentrator, 490849, 590675.
Ore crusher, 56793, 201646, 243343, 243545, 246608, 250656, 538884, 17 F. 515. See also Mill, Pulverizer.
Ore, desulphurizing, 45803.
Ore furnace, 1396, 117430.
Ore mill, Reissue 3633.

Ore roaster, 520481.
Ore roasting and calcining furnace, 495883, 508542.
Ore roasting furnace, 227818, 471264, 532013, 691112.
Ore stamp feeder, 140250.
Ore washer, 194059, 198432, Reissue 9011.
Organ, reed, 87241.
Ornamental chain, 230745.
Ornamenting—see Picture frames.
Ornamenting card board, process of, 388589.
Ornamenting glass, 121119.
Ornamenting leather, 42136.
Ornamenting plush, process for, 605710.
Ostrich feather trimming, 252374.
Outrigger, rowlock, 209960.
Oven, 252054, Reissues 4026, 6397.
Oven, bake, 252054, 700018.
Oven, baker's, 355568, Reissue 11439.
Overalls, 366621.
Overflow for wash basin, 379973.
Overflow valve, Reissue 6739.
Overseaming machine, 428508.
Overshoe, 131199, 131200, 131201, 166669. See also India rubber.
Overshoe buckle, 301884;
Overshoe clasp, 305410, 326355, 326357.
Ox shoes, dies for forging, 314189, Reissue 6113.
Ox shoes, method of forging, 314192.
Oxydonor, 587237.
Package carrier—see Cash.
Package carriers, safety lock for, 645505.
Package filling machine, 633675.
Packer for oil wells, 167400.
Packing—see Hat, Piston, Well.
Packing and shipping case, 496157.
Packing, asbestos rope steam joint, 257167.
Packing (baling) hay, 68282
Packing (baling) plastering hair, 152560.
Packing case, Reissue 8091.
Packing, door, 479973.
Packing, elastic, Reissue 3579.
Packing envelopes, Reissue 9755.
Packing for oil well, Reissues 7244, 7494, 7772, 8491.
Packing for pistons, 29576.
Packing for steam engine, metallic, 6757.
Packing ice cream, 113239.
Packing kindling wood, 93775.
Packing, matting, etc., sheet material for, 622889.
Packing, piston, for pump, 261026.

PACKING—PAPER

Packing, piston rod, Reissue 9365.
Packing powders, Reissue 2769.
Packing, steam, 17835, 21 F. 122.
Packing, steam joint, 462278.
Packing stick candy, Reissue 9942
Packing, stuffing box, 13145, 524178.
Packing thread, June 20, 1821.
Packing, tubular, 337100.
Packing vulcanized rubber, 86296.
Pad—see Horse, Saddle, Stair.
Pad, coach, 173371.
Pad, harness, 302548, 402719, 423797.
Padlock, 1243, 35030, Reissue 10272.
Pail, bail ear for, 147343, 344667.
Pail graning machine, 45590.
Pail, machine for making wood pulp, 342609.
Paint, Reissue 7031.
Paint can, 24748, 26268, 131089, 136575, 298018.
Paint, composition for removing, 714880.
Paint for ship's bottom, Reissues 4598, 4599.
Pallets of clock escapement, 84517.
Palm leaf, preparing, Apr. 3, 1835, Reissue 31.
Pan—see Biscuit, Cake, Sauce.
Pan, biscuit, 96605.
Pan, cake, 140619.
Pan or other vessel, 480555.
Pantaloons, 178287, 178428, Reissues 6335, 9616.
Paper—see Roll, Roofing, Sand, Staple, Toilet.
Paper and cloth, uniting, 134105.
Paper bag, 48036, 123811, 134244.
Paper bag machine, 24734, 30191, 37726, 38452, 49951, 242661, 267-774, 337965, 558969, 598497, Reissues 920, 6050, 8357.
Paper bag, machine for filling, 539171.
Paper bag machine, satchel bottom, Reissue 9202.
Paper bag, method of making, Reissue 10083.
Paper bag, process for making satchel bottom, 258272.
Paper board, 492927. See also Pasteboard.
Paper board cutting machine, Reissue 6315.
Paper board lining machine, Reissue 8883.
Paper board manufacture, 210714.
Paper box, 124319, 132368, 171866, Reissue 7488.
Paper box, folding, 286360, 350727,
Paper box machine, 244919, 364161.
Paper boxes, machine for attaching corner stays to, Reissue 11167.
Paper boxes, machine for making, 423415.
Paper box, manufacture of, 183423, 259416.
Paper cartridges, machine for making, 237605.

Paper collar, 47107, Reissues 2034, 2309, F. Cas. 9488.
Paper, composition for manifolding, 348072.
Paper cuffs, 56737,
Paper cutting—see Cutting.
Paper cutting tool, 533374, 533375.
Paper decoration, 603619.
Paper, die for ornamenting, 228939.
Paper fastener, 162183, 162184, 212316, 286143, 337182.
Paper fastener, metallic, 56587.
Paper file, 386674, 386675. See also Letter.
Paper file, compresser for, 312086.
Paper file, index for, 331259.
Paper folding, 21172.
Paper folding machine, 211848, 331280, 441646.
Paper for twine, machine for cutting, Reissue 1825.
Paper holder, 217909.
Paper machine, 393538.
Paper, machine for creasing, 298425.
Paper, machinery for waxing, 217280.
Paper making, rag engine for, 303374, 347043.
Paper manufacture, 158249.
Paper, naphthaline, 397259.
Paper perforator, 32370.
Paper, process of manufacturing flexible, 216108.
Paper pulp, 17387.
Paper pulp articles, process of toughening, Reissue 10282.
Paper pulp barrel heads, machine for moulding, 258236.
Paper pulp barrels, machine for making, 308615, 308616.
Paper pulp barrels, machine for moulding, 243678.
Paper pulp boiler, 25418, 38901.
Paper pulp manufacture, 243677, Reissues 1448, 1449, 4418.
Paper pulp, strainer for, 511770, 530586.
Paper, sizing, 127858.
Paper slitting machine, 392262
Paper splitting and folding machine, 451459.
Paper stapling device, 220933.
Paper stapling machine, 220932.
Paper, sticky—see Fly
Paper tube, 441846, 444233.
Paper tubes machine for making, 104312.
Paper, wall, tool for trimming, 389901.
Paper, water proof, 378520.
Paper, waxing, 209393, Reissue 8460.
Papers, filing and binding, 226402.
Parcel carrying system—see Cash, Package.
Parer—see Apple.
Paring, fruit, machine, 114867, 232371.

PASSENGER—PERFORATING

Passenger elevator, 257943, 107 F. 131.
Paste, 52779.
Pasteboard manufacture, 184896. See also Paper.
Paste cup, 649864.
Patterns, box, machine for cutting, 272354.
Paving blocks, mode of cutting, 94063.
Paving compound, 342853.
Pavement, 74862, 88765, 94062, 94063, 101590, 121544, 134404, Reissues 1583, 2748, 3274, 4106, 4364. See also Asphalt, Concrete.
Pavement, artificial, 373295, 387308.
Pavement, composite, 269480.
Pavements, composition for, 206112.
Pavement, concrete, 174648, Reissue 4364.
Pawl and ratchet, 293957.
Pea hulling machine, 500299. See also Hulling.
Peas, process of cooking, 215313.
Peas, process of gathering and hulling, 499397.
Pearl button, apparatus for cutting, 450057.
Peat machine, 53011.
Pedal—see Bicycle, Pianoforte, Velocipede.
Pedals, bicycle, 533867, 546071.
Pedals for velocipedes, 235551.
Pedals, tread for bicycle, 679043.
Peg cutting machine, Reissue 409.
Pegging—see Shoe.
Pelt—see Unhairing.
Pelts, machine for brushing and for removing hairs from, 557129.
Pelts, machine for plucking, 536742.
Pen, 8641, 73255. See also Fountain.
Pen holder, cork sleeve, 378223.
Pen, stylographic, 199621, 227416, Reissue 9716.
Pencil, Reissue 3863. See also Lead.
Pencil and eraser, 19783, 66938.
Pencil case, 11820.
Pencil, lead, 461911.
Pencil, lead holder for, 292313.
Pendant, watch case, 411420.
Pendulum level, 17023.
Pepper dredge, 752903.
Pepsin, 338471, 344433, 424357.
Pepsin, manufacture of, 286138.
Peptone pepsin, 24 F. 144.
Percolator, 256504. See also Filter.
Perforated—see Music sheet.
Perforated wrapper with tearing slip, 519158.
Perforating machine, paper, 170873.

Perforator, paper, 32370.
Perfume holder, 432451.
Permutation lock, 98622. See also Combination, Lock.
Petroleum, car for, Reissue 2261. See also Car.
Petroleum, distilling apparatus, 68426.
Petroleum, process for desulphurizing, 370950.
Phenacetine, 400086, 94 F. 864.
Phonogram blank, 414761.
Phonograph, 382418, 386974, 430278, 110 F. 26, 117 F. 624. See also Gramophone, Graphophone, Talking machine.
Phonograph record, 682992.
Phonograph record, apparatus for reproducing, 648935.
Phonograph record, composition for, 782375.
Phonograph record, process of duplicating, 667662, 682991, 713209.
Phonograph recorder and reproducer, 397280.
Phonograph reproducer, 484584.
Photographic camera, 369818. See also Camera.
Photographic film, 539713, 100 F. 1007.
Photographic film, device for making, 599631.
Photographic film holder, 248179.
Photographic film, machine for making sensitive, 358848.
Photographic film, manufacture of flexible, 417202.
Photographic film tension, 317049.
Photograph in relief, process of producing, 567748.
Photograph, method of producing embossed, 556591.
Photographic paper, process for coating, 370110, 370111.
Photographic shield, 21829.
Photographic shutter, 287858, 316564, 362211.
Photographic shutter, pneumatic, 208956.
Photography, 179316, 8 F. 707.
Piano attachment, 515426.
Piano key manufacture, 210780.
Piano, music desk for, 468077.
Piano playing, instrument for teaching, 344462, 344464, 391439.
Pianoforte pedals, 169931.
Pick, Reissue 6951.
Picker—see Loom.
Picture—see Motion.
Picture frame, machine for ornamenting, Reissue 11980.
Picture mat, material for, 452911.
Pictures, reflecting, for slides, 11 F. 800.
Pie, mince, compound, 268972
Pier for bridges, 36512.
Pig metal, method of mixing molten, 404414.
Pile, concrete, 733286, 733288.
Pile driver, 205244, 284282.
Pile driver, steam. 185458, 273904.

PILL—PLANE

Pill manufacture, 110630.
Pills, device for holding and dipping, 389485.
Pillow, metallic, or cushion, Reissue 11514.
Pin, 2275, 2970. See also Safety.
Pin, insulator, 493434.
Pin for braid, 220126.
Pin for neckwear, 220610.
Pin retainer, stick, 630972.
Pin, scarf, 285641.
Pipe—see Lead, Stove.
Pipe, conveying, for dredging machine, 601524.
Pipe, corn cob smoking, 205816.
Pipe, corrugating, 473020.
Pipe coupling, 105290 Reissue 8291.
Pipe coupling, car, 47 F. 663.
Pipe covering, 345843.
Pipe covering, steam, 276044, 456661, Reissues 10375, 10376.
Pipe cutter, Reissue 10021, 53 F. 109.
Pipe elbow, 607620
Pipe, gas and water, 45201.
Pipe, iron, flask for casting, 37037.
Pipe joint, gas, 345463.
Pipe, method of corrugating, 473020.
Pipe molding apparatus, 295205.
Pipe molding machine, 209428, Reissue 8562.
Pipe, mortar, mold for making, 196295.
Pipe reamer and squeezer, 91201.
Pipe, seamless, forging machine, 741301.
Pipe section holding device for riveters, 622251.
Pipe, sheet metal, machine for shaping, 402140.
Pipe threads, band for protecting, 440168.
Pipe tongs, 22157.
Pipe union, steam, 367725.
Pipe, water, pressure safety device for, 141685.
Pipe, wooden, 359590, 104 F 553.
Pipes, wrought iron, thread protector for, 311171.
Piston, 53630. See also Packing.
Piston packing for pump, 261026.
Piston, packing rings for, 473182.
Piston rod packing, 334579.
Piston, water meter with revolving, 433088.
Pitcher, ice, 18456, 21717.
Pitching barrel, 42580.
Pivoted—see Tilting.
Plaiting machine, 192098, 595728.
Plane, Nov. 17, 1819.
Plane, bench, Reissue 6498.

Plane iron, 473087.
Plane, wood, 24076.
Planer, wood, 259958.
Planing—see Stone.
Planing machine, 32904, 138462, Reissue 8438.
Planing mill, Dec. 27, 1828, Reissue 71.
Planter—see Corn, Seed.
Plashed hedges, 254085.
Plaster, compound to restrain the setting of, 397296.
Plastic—see Statuary
Plastic compound for vegetable fibre, 65267.
Plastic material, 225261, 255937.
Plastic material, embossing, 332444.
Plate—see Dental, Tie.
Plate, drainer, 481981.
Plate for coffin, 619567.
Plate glass, labeling, 184933.
Plate glass polisher, Reissue 10872.
Plate holder—see Camera.
Plate of tin, decorating, Reissue 7556.
Plate, wooden, 273773, 276198.
Plated seamless wire, 445814.
Plated wire—see Jeweler's wire.
Platform scale, 524271.
Plating—see Metal.
Pliers, 427220. See Nippers.
Pliers, cutting, 232975.
Plow, Nov 9, 1820, Oct. 1, 1825, March 4, 1836, 14287, 25098, 55630, 82130, 110722, 127878, 136108, 158482, 290111, 313394, 415542, 650771, Reissues 4383, 6131, 3094, 3609, F. Cas. 5947. See also Cultivator, Snow.
Plow beam, 231147
Plow, convertible disc, 692655.
Plow, gang, 68673, 83283, 88413, Reissue 8986.
Plow jointer, Reissue 6824.
Plow point, 231810.
Plow, riding attachment for, 199082, 284036.
Plow, rolling coulter, 67222, Reissue 4533.
Plow, rotary disc, 556972.
Plow, side hill, 220453.
Plow, sulky, 154293, 201670.
Plow, wheel, 285412, 353497.
Plug—see Sparking, Tobacco.
Plush, process for ornamenting, 605710.
Pneumatic—see Drill, Photographic shutter.
Pneumatic conductor for elevator signals, 307049.
Pneumatic drilling tool, 364081.

PNEUMATIC—PRESS

Pneumatic duster, 521174.
Pneumatic motors, governor for, 473338.
Pneumatic pipes, valve for, 401680.
Pneumatic regulator for musical instruments, 659442.
Pneumatic surfacer for dressing stone, 701580.
Pneumatic tester for cans, Reissue 11443
Pneumatic tire, 488494, 489714, 495975, 497971, 502047, 513617, Reissue 11153
Pneumatic tool, 472495, 537629, 549102, 647415.
Pocket book clasp, 47135, Reissues 8106, 8123.
Pocket lighter, Reissue 8490
Pointing—see Spike.
Police—see Signal.
Police nippers, 152182.
Polisher—see Shoe.
Polisher, plate glass, Reissue 10872.
Polishing boot heel, 317622.
Polishing, composition for, 693556.
Polishing rods, machine for, 153677.
Pool ball frame, 228879.
Portable—see Boat, Forge, Hay, Range.
Portable elevated railroad, 285116.
Portable grain elevator, Reissue 10521.
Post office box, Reissue 8783.
Postage stamp, 91108.
Postmarking machine, 194 U. S. 601.
Potato digger, 224123, 264603.
Potato planter, 235401, 276994.
Pottery ware, art of decorating, 399029.
Poultry crate, 444561.
Pouncing—see Hat
Powder—see Baking, Smokeless.
Powder receptacle, tooth, 706710.
Power—see Loom.
Power accumulator, hydraulic, 202660.
Power press for punching and forging metal, 264837.
Precious metal, process of recovering from solution, 607719.
Preserving animal and vegetable substances, Reissue 5648.
Preserving animal substances, 36107.
Preserving corn, 34928, 35274, 35346, 36326, Reissues 7061, 7067.
Preserving fish, 31736, 90334, 12 F 627.
Preserving fruit, Reissue 3252.
Preserving meat, 125530, 197314, Reissues 3119, 6370, 6451, 6452.
Preserving shrimp, Reissue 9957
Press—see Baling, Book binder, Cheese, Cotton, Hay, Printing, Punching, Tobacco.
Press, cheese, Reissue 5256.

Press, clay, 169871.
Press, fruit, 299815.
Press grain drill, 355716.
Press, lead, hydraulic, 346563.
Press, power, for punching and forging metal, 264837.
Press, stop cylinder, 285826.
Pressing machine, cloth, 387290, 387292, 387297, 424971, 469372.
Pressing machine for tailors, 20519.
Pressing sheet metal, 114068.
Pressure guage, 145726.
Pressure in a series of fermenting vessels, apparatus for regulating, Reissue 10284.
Pressure regulator, 335033.
Pressure vessel, 159433.
Pretzel cutter, 274264.
Pretzels and crackers, apparatus for treating, 345186.
Price scale, 385005
Priming cartridges, machine for, 181309.
Priming tool for reloading cartridges, 257860.
Printed and typewritten work, method of assimilating, 640013.
Printed sheets, drying rack for, 392735, 452898, 504985.
Printer's galley, Reissue 6326.
Printer's leads, machine for cutting, 206781.
Printing—see Bank note, Type.
Printing, autographic. 180857.
Printing barrel head, 557582.
Printing envelopes, 420792.
Printing machine, 291521, 317663, 322309, 529680, Reissue 8801.
Printing machine, bed motion for cylinder, 688690
Printing machine, mechanical movement for, 606096.
Printing machine, rotary, 410271, 415321.
Printing machines, sheet delivering mechanism for, 269159.
Printing machine, under guide for, 340785.
Printing machine, web, 376053.
Printing on boards, machine for, 359972.
Printing on metal, 184759.
Printing on pyroxiline compounds, art of, 348222
Printing press, 9721, 16263, 22611, 38200, 70773, 73943, 87950, 98087, 131217, 238720, 478503.
Printing press feed, 229998.
Printing press, make-ready device for, 613221.
Printing press, paper carrying mechanism for, 343677.
Printing press, platen for, 549691, 613218, 613219.
Printing press, registering counter for 100399.
Printing press sheet deliverer, Reissue 7786
Printing press, tympan for, 613217, 613220.
Printing, relief line metal plates for, 153084.

PRINTING—PUMP

Printing telegraph, Reissue 3810, F. Cas. 9858.
Prism glass, daylight, 593045.
Prison, 32 F. 629. See also Jail.
Prison, construction of, 25662.
Privy cleaning apparatus, 73938, Reissue 6962.
Privy, furnace for, 264568.
Processing apparatus, 251456.
Projectile, 26904, 32986, 34059.
Propeller, 9810, 10124.
Propeller, ships', 509553.
Protector, chest and neck, 593954.
Protector for wrought iron pipes, 311171.
Protector, watch, 413644.
Puddle balls, rolling, 1890.
Puddling furnace, 135650, 153110.
Pulley, 67470, 393941. See also Sash.
Pulley, band, 456722.
Pulley, belt, 238702, 248598.
Pulley, conveying belt idler, 671604.
Pulley, hay carrier elevating, 434544.
Pulley, method of making wooden, 368490.
Pulley, separable, 260462.
Pulley, split, 275947.
Pulley, split wooden, 351064.
Pulley, reversing, 216787.
Pulp—see Pail, Paper.
Pulp barrel head, paper, 206396.
Pulp digesters, acid proof lining for, 644367.
Pulp digester, gas separator for use with, 565263.
Pulp digester, wood, Reissue 11282.
Pulp screening machine, 417451.
Pulverizer—see Ore crusher, Stone breaker.
Pulverizer and crusher, 589236.
Pulverizing mill, tubular ball, 548115.
Pulverizing ore, mill for, 515673.
Pulvurulent acid, Reissue 2979.
Pump, March 23, 1813, Aug. 5, 1831, Nov. 19, 1833, 42126, 78854, 90930, 155670. 188879, 241573, 259394, 339445, Reissues 7006, 8025, 8026, 8631, 9199, 7 F. 920, 17 F. 812. See also Oil, Relief valve.
Pump bucket, 178735.
Pump, bucket for chain, 347342, Reissue 6531.
Pump, coupling for bicycle, 507224.
Pump filter, Reissue 5804.
Pump for fire engine, 42920.
Pump for gas, 117925.
Pump for oil well, 47133, 50919.

Pump, gas, 67 F. 535.
Pump, gas liquefying, 175020.
Pump, hydraulic air, 504097.
Pump piston packing, 261026.
Pump regulating valve, 207485.
Pump, ships', Reissue 10418.
Pump, steam, 5352, Reissue 9818.
Pump, valve, 141587.
Pumping beer, 673922.
Punch, 427497.
Punch, metal, Reissue 2542.
Punch, spiral, 161968, 267751.
Punching—see Metal.
Punching machine, 148566, 376009.
Punching press, 264837.
Purifier and heater for feed water, 274048.
Purifier, feed water heater and, 400319, 542331.
Purifying fat bodies, 11766.
Purifying vegetable oils, 246075.
Purse, 439086.
Pyrometer, 494245, 520875.
Pyrotechnic signal, 237092.
Pyroxiline, Reissue 5928.
Pyroxiline compound, 269340, 269343, 269344.
Pyroxiline compound, art of printing on, 348222.
Pyroxiline compounds, imitation onyx from, 546360.
Pyroxiline, or nitro cellulose, 36 F. 110.
Pyroxiline dental plate, 113055.
Pyroxiline, treating, Reissue 10546.
Quill grinding machine, 664564.
Quilting fabrics, machine for, 308981, 308982.
Quilting machine, 118404, Reissue 9097.
Quilting, sewing machine for, 151886.
Race course, automatic, 410981.
Race track, starter's gate for, 553740.
Rack, cue, 72969.
Rack, hat, 56569
Racking beer, 537939. See also Beer.
Rag engine—see Paper making.
Rail brace, 352286.
Rail bender, 344793.
Rail carrying apparatus, 124867, Reissue 7898.
Rail crossing, girder slot, 367746.
Rail for dash board, 339307.
Rail joint, 545040.
Rail connection, electric, 460615, 434087.
Rail for railroads, Aug. 23, 1831, 3889, 9703.

RAIL—RAZOR

Rail, method and apparatus for rolling, 360036.
Rail stay, railway, 757754.
Rail, street railroad, 272554.
Railroad—see Cable, Signal, Spike, Switch.
Railroad car, 428068.
Railroad car, drawbar for, 304391.
Railroad car gate, 288494.
Railroad car, machine for unloading, 56906, 80276.
Railroad car ventilator, 89974.
Railroad car window, 192014.
Railroad cattle guard, 373359.
Railroad, chair for, 316995.
Railroad crossing, 555449, 18 App. D. C. 83.
Railroad curve, Sept. 26, 1835.
Railroad draw, 13258.
Railroad, electric, 407188, 431720, 465407, 465432.
Railroad, electric pleasure, 594700.
Railroad, elevated, 89233.
Railroad frog, Reissue 8914.
Railroad, gravity switch back, 332762.
Railroad joint, angle splice for, 228347.
Railroad, marine, 41452,
Railroad motor, electric, 354793, 406600.
Railroad motor, suspension for electric, 448260.
Railroad switch, 30100, 117198, Reissue 7690, 89 F. 96.
Railroad system, bitransit, 570451.
Railroad ticket, 163462, 342941.
Railroad ticket case, 86277, 145388.
Railroad torpedo, 667813.
Railroad track cleaner, 190563, Reissue 8388.
Railroad track, drill for, 205927.
Railroad track scale, 359636.
Railway—see Railroad, Street, Torpedo, Trolley.
Raisin seeder, 608108.
Rake, 65573, Reissues 1914, 1915, 2982, 2994, 7988, 8475, 9731. See also Hay.
Rake and reel for harvester, Reissue 2951
Rake, mash, 207283.
Range, portable cooking, 310276.
Rasp, 383999
Rasp cutting machine, 376400, 397254.
Rasp, method of forming teeth of, 408936.
Ratchet—see Lawn mower.
Ratchet and pawl, 293957.
Ratchet wrench, 277256.
Rawhide, machine for treating for belting, 77920.
Razor, 229127.

Razor casing, safety, 109 F. 1064.
Razor, safety, 344115, 387359, 561707.
Receiver for wireless telegraphy, Reissue 12115.
Receptacle for clothing, 642075.
Record—see Sound.
Recorder—see Cash, Time.
Recording computing machine, 465255.
Recording measurements of time, space or quantity, apparatus for, 424291
Rectal speculum, 224991.
Reed organ, 87241.
Reel for dyeing, June 27, 1809.
Reel for harvester, Reissue 2951. See also Rake, Reel.
Reel, rod, 19 App. D. C. 192.
Refining zinc, 448802.
Reflecting pictures for slides, 11 F. 800.
Reflector, Reissues 3826, 3827.
Reflector, incandescent lamp, 634295.
Refrigerating machine, 302294.
Refrigerator, 204216, 261736, 295259, 343369, Reissues 455, 7643, 8463.
Refrigerator and ventilator, car. Reissue 11324.
Refrigerator crate, 547185.
Refrigerator door packing, 479973.
Refrigerator, ventilator for, 537293.
Register—see Billiard. Cash, Conductor, Coupon, Fare, Hotel.
Register, coin. toy, 384523.
Register, conductor's, 76646.
Register, coupon and bond, 63419, 19 F. 313.
Register, hotel 63889, 63924.
Registering counter for printing press, 100399.
Registering steam gauge, Reissue 4775.
Regulating alternating currents—see Alternating current.
Regulating electric light, 321749.
Regulating electrically driven machinery, apparatus for, 587442.
Regulating electrically driven machinery, method of, 587441.
Regulating steam for engine, 1868.
Regulator—see Temperature.
Regulator, damper, 335080
Regulator, electric, 613853.
Regulator, electric motor, 428169.
Regulator for alternating arc lamp circuit, 684340.
Regulator for dynamo, 238315, 264668.
Regulator for dynamo, electric, 599892.
Regulator for electric circuit, 535158
Regulator for electric motors, 499769.
Regulator for gas engine, 583585.

REGULATOR—ROCK

Regulator for hot-air furnaces, 182769.
Regulator, watch, 284079.
Regulator, water supply, Reissue 5132.
Relief—see Printing.
Relief photography, 567748.
Relief type production, 388361.
Relief valve, automatic, 101814, 143920.
Relief valve for fire engine, automatic, 134435.
Relief valve for force pump, automatic, 120958.
Relief valve for beer cask, 219057.
Relief valve for beer vessels, 222975.
Relief valve for steam fire engine, 42920, 45 F. 243.
Rendering lard, apparatus for, Reissue 5925.
Repairing—see Roads.
Reservoir, well, Reissue 4165.
Resist, aniline black, 499689.
Retort for gas, 36065.
Revenue stamp, 93391.
Reversing gear for steam engines, 248277.
Reversing pulley, 216787.
Revolver, safety device for, 535097.
Revolving cue rack, 72969.
Rheostat controller, 676426.
Ribbon mechanism for typewriter, 650438.
Rifle front sight cover, 313212.
Rifling machine for heavy guns, 318824.
Rim, wooden, for bicycle wheel, 506430.
Ring—see Spinning.
Ring, halter, Reissue 1514.
Ring, hat packing, 574894.
Ring, interchangeable, 389778.
Ring, martingale, 37941.
Ring supporter, 118622.
Ring, suspension, for business cards, Reissue 5067.
Rivet setting machine, Reissue 8276.
Riveting machine, 501681, 553284.
Road grader, 454048.
Road, machine for making, repairing and cleaning, 331920.
Road scraper, wheeled, 379550, 380068.
Road working machine, 362679.
Roaster, coffee, Reissue 9260.
Roasting—see Calcining, Ore.
Roasting and reducing ores, apparatus for, 44145.
Rock, blasting, 291606.
Rock boring apparatus, 694535.
Rock drill, 52960, Reissue 3690, 2 F. 353. See also Core lifter.
Rock, process of boring, 694534.

Rock, rotary drill, 247872.
Rocking chair, 1531, 92379, 247472, 273630, 334102, 334345, Reissue 9046.
Rocking chair, platform, 313429.
Rocking chair, spring, 297108, 354043.
Rod reel, 19 App. D. C. 192.
Rod mill plant, 440863.
Roll paper cutter, 394121.
Roll paper holder and cutter, 301596.
Rolls for rolling metal blooms, 303036.
Roller—see Harrow, Shade.
Roller abstractor for watches, Reissue 9467.
Roller bearing, 595696.
Roller, casting chilled, March 3, 1835.
Roller coasting structure, 310966.
Roller, elastic, manufacture of, Reissue 5081.
Roller grinding miil, 222895.
Roller mill, 228525, 238677, 269623, 274508, 289518, Reissue 10139, 40 F. 474.
Roller skates, truck for, 508617.
Roller, spring, 11638.
Roller, trunk, 108300.
Rolling—see Logs.
Rolling chair, 675693.
Rolling mill, 130529, 176996, 247931, 289524. See Rod
Rolling mill, continuous, 247665.
Rolling mill, feeding mechanism for, 345953, 352748.
Rolling mill plant, 319694.
Rolling puddle balls, 1890.
Rolling rails, 360036.
Rolling wire rods, mill for, 392365.
Roof, car, 414069, 446780.
Roof for burial vault, 244224.
Roofing composition. Reissues 2684, 5951.
Roofing fabric, 418519, 429885, F. Cas. 11613.
Roofing plate, sheet metal, 256083.
Roofing, preparing paper for, 91133, 95689.
Roofing, sheet metal, 188079, 403844.
Rope clamp, 208157.
Rope fastener, 322501.
Rope or cord, ornamental, 599191.
Rope tramway and apparatus, 203249, 203549.
Rope, wire, clamp, 388840.
Rosaniline, sulphurated, coloring compound, 250201.
Rosettes of yarn, manufacture of, 177194.
Rotary drill, 248982, 261978.
Rotary rock drill, 247872.

ROWLOCK—SALES

Rowlock outrigger, 209960.
Rubber—see Caoutchouc, India, Mold, Tire.
Rubber, art of recovering from waste, 249970, 300720.
Rubber belting, machine for making, Reissue 10938.
Rubber cloth, 283057.
Rubber coated harness, Reissues 5155, 5156.
Rubber, process of covering metallic articles with, 37 F. 792.
Rubber shoes, die for securing heel plates to, 296623.
Rubber shoes, machine for securing heel plates to, 296624.
Rubber tire. 315537.
Rubber tired wheel, 554675, 100 F. 85.
Rubber tread for shoe, Reissue 12219
Rubber, vulcanizing, 661177, 661178.
Rudder head—see Tillers.
Ruffles, 28244, 42403.
Ruffle machine, Reissue 6566.
Ruffler, Reissue 6565.
Ruffling—see Sewing machine.
Rug fastener, 541320.
Running gear for vehicles, 180886, Reissue 9729.
Saddle, July 16, 1819, 4860, 5476. See Bicycle, Velocipede.
Saddle, bicycle, 293725, 532444, 558218, 594451.
Saddle for harness, 170916.
Saddle pad for harness, 86112.
Saddle tree, 144164, 151730, 166907, 195415.
Saddle tree for harness, 180676.
Saddle tree, side, 97236.
Safe, Nov. 12, 1830, 3117, 273585, 281640, 283136. See Lock.
Safe, burglar proof, 246748.
Safe covering, electric, 120874.
Safe door. 67046.
Safe, fire proof, 281640.
Safety—see Razor.
Safety apparatus for steam boiler, 5254.
Safety brake for elevator, 347778.
Safety catch for electric light circuits, 281576.
Safety cut out, 433187.
Safety device, electric, 132112.
Safety device for revolver, 535097.
Safety device for water pipes, 141685.
Safety pin, 236149
Safety pin, process of making, 380380.
Safety pressure device for water pipe, 141685.
Safety valve, 200119, 496058 See Valve.
Safety valve, muffler for, 297066.
Sales accounts, means for cashing, 704168.
Sales book and holder, manifolding, 647934.

Sales book, manifold, 406845.
Sales book, manifold copying, Reissue 10359.
Sales slips, duplicate, 288048.
Saline solutions, apparatus for cooling, 362938.
Salt, apparatus for making solar, 180962.
Salt caster, 39889, 71643.
Salt dredge, 752903.
Sample case, 526486.
Sand and gravel separator, 126968.
Sand blast, 108408.
Sand box—see Axle.
Sand box for carriage axle, Reissue 6350.
Sand, drier for, 121746.
Sand paper for finishing shoes, 178994.
Sand paper halder, 100229.
Sand washer, 206514,
Sanding machine—see Brick mold.
Sash—see Window
Sash balance, 126031, 285079.
Sash cord guide, 216767.
Sash pulley, 64957.
Sash pulley case, 185369.
Satchel—see Lock.
Satchel frame, 340459, 378263, 378620
Satchel handle, 314724.
Satchel latch, 242944, 303716.
Saucepan, 225492.
Savings bank—see Bank.
Saw, 37835, 123466, Reissue 4096, 8 F. 806. See also Logs.
Saw, circular, March 16, 1820, Reissue 8076.
Saw, cross cut, 269728.
Saw, cross cut, handle, 78653
Saw dog, 233409, Reissue 6733.
Saw guide, 78880, Reissue 1527.
Saw, machine for swaging and jointing, 321376.
Saw logs, machine for turning, 163398.
Saw, metal cutting, 328019.
Saw mill, March 27, 1835, 51310.
Saw mill, band, 369881, 442645, 468303
Saw mill, circular, 2174, 7027.
Saw mill dog, 122215, 196102.
Saw mill, gang, 212526.
Saw mill, log carriage for, 279537.
Saw mill, reciprocating, 156193, 377630.
Saw set, May 24, 1830, 441962, 532175, 703440.
Saw sharpening machine, 254869, 654844, 669251, Reissue 10252.
Saw stretching machine, 259068, 548394.

Saw support, 654845.
Saw support and guide, 654843.
Saw teeth, device for swaging, 333540.
Sawing—see Shingle, Stone.
Scale—see Weighing.
Scale, computing, 486663, 616348, 700919, Reissue 11738, 126 F. 639.
Scale, computing weighing, 700919.
Scale, computing, weighing and price, 451075.
Scale pan, 304172.
Scale pan, glass, 214643.
Scale, platform, 524271.
Scale, railroad track, 359636.
Scale, wagon, 127 F. 709.
Scale, weighing, 375102.
Scarf, 222264.
Scarf, neck, 54 F. 528.
Scarf pin, 285641.
School desk, 123797,
School furniture, adjustable supports for, 508557.
School seat—see Hinge.
Scoops, 84803.
Scoop, elevator, 54649.
Scraper—see Road.
Scraper, woven wire mat and, 399554.
Scraping hogs, device for, 377353.
Screen—see Coal, Window.
Screen, folding, 447461.
Screening, slashed metallic, 297382.
Screw, 116922, Reissue 8121.
Screw cutting dies, 253996.
Screw driver, 671039.
Screw machine, 79, 1411, 9688, Reissue 2487.
Screw, machine for making, Reissue 9290.
Screw making machine, wood, 125269.
Screw peg for boots and shoes, 85374.
Screw, set, 278759.
Screw threads of pipes, band for protecting, 440168.
Scrubbing machine for cask, 213447.
Scuttle, coal, 150921, Reissue 3438.
Scythe snathes, 114.
Sealing fruit cans, composition for, 636922.
Sealing wax, 108 F. 86.
Sealing wax, composition for, 307746.
Seamless plated wire, 445814.
Seat, 125329, 134486, 163537, Reissne 1126. See Carriage, Cushion.
Seat back, handhold on car, 648927.
Seat, bicycle, 252280.

Seat bottom, 639222.
Seat, car, 359354, 626831.
Seat, chair, 185576.
Seat hinge, school, 416660, 531686.
Seat, jump, 300847.
Seat or bed bottom, spring, 745345.
Seat or cushion, metallic, 562940.
Seat, school—see Hinge.
Seat spring, 179400, 371448
Secondary battery—see Storage battery.
Sectional—see Steam boiler.
Seed cleaner, 271839. See also Grain.
Seed drill, 30685, 31819, Reissues 1393, 1394, 1395. See also Grain.
Seed, oleaginous, treating, 168164.
Seed planter, 26410, Reissues 623, 1036, 1037, 1038, 1039, 6384.
Seed scattering machine, 136107.
Seed separator, 155874, 322465.
Seed steaming apparatus, Reissue 8615.
Seeder, 88971, 216025, Reissue 554. See also Raisin.
Seeder and cultivator, disk, 344950.
Seeding machine, 31819.
Seeding machine, fruit, 543834.
Separator—see Cream, Grain, Milk, Sand, Seed.
Separator, grain, 41232, 167570, 343324, Reissues 540, 4383, 4793.
Separator, grain and seed, 322465.
Set screw, 278759.
Setting—see Teeth.
Sewage apparatus, 559522.
Sewer excavator, 180718.
Sewer grating, 134978.
Sewering and draining towns, method of, 278839.
Sewing carpet linings, machine for, Reissue 3247.
Sewing looped fabrics, stitch breaking and raveling attachment for machines for, 431957.
Sewing machine, 4750, 7776, 8876, 10965, 10974, 10975, 12015, 12116, 16030, 20775, 24022, 28139, 29785, 30112, 36163, 45422, 53927, 77715, 83909, 83910, 101140, 120949, 208838, 214-513, 229629, 274359, 354499, 459036, Reissues 278, 346, 355, 414, 518, 568, 1145, 1154, 1388, 1562, 2125, 5180, 6550, 7895, F. Cas. 12904, 9 F. 698, 103 U. S. 344. See also Shoe, Shuttle carrier.
Sewing machine and water wheel, Reissue 5590.
Sewing machine attachment, Reissues 9176, 10067.
Sewing machine, band wheel bearings for, 224710.
Sewing machine bobbin, 123625.
Sewing machine, book, 435613.

SEWING—SHEEP

Sewing machine, button, 268369.
Sewing machine, button hole, 236350, 240546, 614973.
Sewing machine, button hole attachment, 192008.
Sewing machine, cloth marker, 28633, 40084.
Sewing machine, cutting attachment for, 224219, Reissue 7860.
Sewing machine, feed for shoe, 545625.
Sewing machine, feed mechanism, F. Cas. 17610.
Sewing machine for embroidery, 83910.
Sewing machine for hat lining, 53927.
Sewing machine for quilting, 151886.
Sewing machine for sewing parallel seams, 86057.
Sewing machine for straw braid, Reissue 10600.
Sewing machine, glove, Reissue 9586.
Sewing machine looper mechanism, 595615.
Sewing machine needle, 110594.
Sewing machine, overseam, 472094, 472095, 541722.
Sewing machine, presser foot, Reissue 7558.
Sewing machine, revolving hook, 419863.
Sewing machine, ruffling attachmet for, 354577.
Sewing machine, ruffling or gathering attachment for, 324261.
Sewing machine treadle, 128460, 261446, 271426, 306469.
Sewing machine, trimmer for, 341790.
Sewing machine, trimming attachment for, 266783, 309699, 324813.
Sewing machine, trimming device for overedge, 263467.
Sewing machine, tuck creaser, 64404, 80269.
Sewing machine, tuck marker, Reissue 4196.
Sewing machine, wax thread, 253156, 374936, 561386.
Sewing machine, welt guide for, 419239, 560705.
Sewing silk, 19283.
Sewing silk manufacture, 42153.
Shade, eye, 729500
Shade fixture, 659315.
Shade, glass, 191224.
Shade holder, 257027.
Shade holder, window, 676557.
Shade holding device, 559446.
Shade roller, 69189, Reissue 7370.
Shades, spring fixture for, Reissue 2756.
Shank—see Shoe
Shank stifleners, method of and machine for compressing, 367484.
Sharpening—see Saw.
Shavings, washing. Reissue 8099.
Shawl strap, 300744, Reissue 4289.
Sheaf carrier—see Harvester
Shearing sheep, Reissue 5701
Shears, 1092.
Sheep shearing, Reissue 5701.

Sheet—see Celluloid, Printing.
Sheet metal—see Pipe, Roofing, Shingle, Spinner.
Sheet metal can, 52972.
Sheet metal, expanded, 527242.
Sheet metal expansible elbow, 342465.
Sheet metal moulding machine, 74068.
Sheet metal moulding, tool for attachment, 178463.
Sheet metal pipe, machine for shaping, 402140.
Sheet metal, pressing and stamping, 114068.
Sheet metal roofing plate, 256083.
Sheet metal vessel, 189250.
Sheet tying, dry pressing, smashing and tableting machine, 452898.
Shell, cannon, 45462.
Shell, explosive, Reissue 521.
Shell extractor for breech loading ordnance, 494917.
Shell extractor for guns, 565605.
Shield, dress, 205024.
Shield, dust, for car axle box, 418439.
Shield, eye, 540746.
Shifting seat carriage, 497765.
Shingle machine, Dec. 28, 1822, 11858, 216344, 335635.
Shingle sawing machine, 380346.
Shingle, sheet metal, 189115.
Ship, armor for, 38206
Ship, bilge lever for, Nov. 6, 1826.
Ship bottom, paint for, Reissues 4598, 4599.
Ship, box keel for, 367828.
Ship keelson, 393713.
Ship log, registering, Reissue 10625.
Ship pump, Reissue 10418.
Ship, securing from decay, Aug. 3, 1822.
Shipping case, 450435, 496157.
Shirt, 253256, 30 F. 921, 923.
Shirt bosom, 156880
Shirt ironing machine. 40 F. 644.
Shoe—see Bathing shoe, Boot and shoe, Brake, Overshoe, Ox shoe, Rubber, Sand paper, Slipper, Tennis.
Shoe and gaiter, 205129,
Shoe buckle, 157395.
Shoe button fasteners, holder for, 429828.
Shoe buttoner, 68361.
Shoe clasp, 303547, 303596, 336769.
Shoe, die for forging ox, 314189, Reissue 6113.
Shoe, die for securing heel plates to rubber, 296623.
Shoe for car brake—see Car brake.
Shoe for truing up car wheels, 605056.
Shoe heel attaching machine, 6[illegible]9707.

SHOE—SIGNAL

Shoe, heel cushion for, 792688.
Shoe last, 36495.
Shoe last joint. 632994.
Shoe, machine for cutting shank pieces for, 675661.
Shoe pegging machine, 36292, 555434, 580379, Reissues 3517, 3533.
Shoe, rubber tread for, Reissue 12219.
Shoe sewing machine, 412704.
Shoe sewing machine, feed for, 545625.
Shoe sewing machine, pull-off for, 564986.
Shoe shank machine, 159577.
Shoe shank, machine for making, Reissue 8163.
Shoe shank stiffeners, machine for cutting, 607602.
Shoe sole polisher, 227839.
Shoe sole trimmer, 238303.
Shoe sole. machine for beating out, 384893.
Shoe sole, machine for nailing, 154129, 184281.
Shoe tip Reissue 8536.
Shoe upper, 620278
Shoe, upper for laced, 552506.
Shoe upper machine, 318731, 344435.
Shoe, vamp stay for, 717348.
Shoulder pad, 359441. See Horse collar.
Shovel. dredging machine. 218427.
Shovel, handle socket for, 208258.
Show card, 4 F. 455.
Show case socket, Reissue 5748
Shower bath, 5993.
Shredder, fodder, 557727.
Shrimp—see Preserving.
Shunt for electric power stations, 497482.
Shutter fastener, 166819.
Shutter hinge. 10477, 156277.
Shutter, noiseless. corrugated metallic rolling, 137595.
Shutter, photographic, 287858. 316564, 362211.
Shuttle—see Loom.
Shuttle carrier for sewing machines. 57585.
Shuttle carrier for swivel loom, 473563.
Shuttle for weaving wire cloth, 239011, 299895.
Sickle sections, serrator for, 524965.
Sidewalk construction, 320066
Sieve, 106597, 130514.
Sifting flour, Reissue 11252.
Sight—see Rifle.
Sign, electric 626667.
Sign letters for attachment. 468720.
Signal—see Fire alarm, Switch.
Signal box, electric, 157002, 288536, 344430.

Signal cartridge, 197339, Reissue 8167. See also Cartridge.
Signal device, circuit controller for railway, 497489.
Signal, electric railroad, 140536, 168058.
Signal, elevator, pneumatic conductor for, 307049.
Signal pyrotechnic, 237092.
Signal, railroad, 284716.
Signal system, municipal, 359687, 359688.
Signal system, police, 359686.
Signaling apparatus, 192644.
Signaling apparatus, electric railroad, 227102, 233746, 241246, 246-492, 270867, 273377.
Signaling apparatus, railroad train, 266806.
Signaling apparatus, telephone, 559411.
Signaling device for street cars, 161568.
Silk—see Dyeing, Sewing.
Silk, machine for lustering, 705716
Silk, method for winding, 267192.
Silk, process of lustering, 705715.
Silo, 627732, 653967.
Silver, apparatus for recovering, Reissue 1651.
Singeing—see Stocking.
Sink, 240146.
Sink, cement, 327209.
Sinking—see Well.
Sirups and mineral water, 193476
Skate, 55901, 66316, 248272, Reissues 6369, 8590. See Roller.
Skein, axle, for vehicles, 216615
Skewers, machine for pointing, 250700, 378934.
Skirt, 24720
Skirt binding, 61172.
Skirt machine, 37124, Reissue 1518.
Skirt protecting band, 116 U. S. 593.
Skirt protector, 155534, 161012, 553707, 621134.
Skirt supporter, corset, Reissues 2654, 4831.
Skylight, Reissues 8674, 8675, 8676, 8688, 8689.
Slat—see Blind.
Slate, artificial, 399374.
Slate frame, 14624.
Slate picker, 494395.
Slate picker for separating slate from coal, 379253.
Sleeper—see Car.
Sleeping car, compartment, for railways, 122622.
Sleeve mit, 236723.
Sleeve supporter, 156429, 202735.
Sleigh runner for wheeled vehicles, 400381.
Slicer—see Apple.
Slide—see Reflecting, Table, Toboggan.

Sliding door hanger, 369451.
Sling for packages, 119765.
Sling, hay, 393940.
Slipper insole, 525746.
Slipper sole, 539337.
Sluice fork, 23 How. 2.
Sluice gate, 1517.
Smelting furnace, electric, 319945, 335499.
Smelting furnace, method of tapping a, 121385.
Smelting ore, art of, 36 F. 179.
Smelting ore by electricity, process of, 319795.
Smokeless powder, apparatus for distilling volatile substances from, 503586.
Smoking—see Pipe.
Smut mill, Reissue 3794.
Snap hook, 47764, 16 F. 243.
Snap switch, electric, Reissue 11395.
Snatch block, metal, 387071.
Snow plow, 298441, 367694.
Soap, 118440, Reissue 5007.
Soap manufacture, 47385, 56259.
Socket—see Whip.
Socket, caster, 594937.
Socket, electric lamp, 311100, 489682, 24 App. D. C. 286.
Socket, forging metallic, Reissue 6404.
Soda fountain, 149254, 179583, Reissues 8834, 8837, 9028.
Soda fountain, draft tube for, 498962.
Soda water apparatus, 40811, 264586, Reissues 2711, 11313.
Soda water, dispensing apparatus for, 414272.
Sofa bedstead, 186608.
Soft dough machine, 209963
Solar salt, 180962.
Soldering, 191405. See Can.
Soldering iron, 115760, Reissues 8466, 8781.
Soldering tool, 194519.
Sole—see Boot, Shoe.
Sole cutting machine, 407735.
Sole trimming machine, 472399.
Sound record, 548623.
Sound records, production of, 688739.
Sounder—see Telegraph.
Spark arrester, Reissues 5050, 5051.
Spark arrester, locomotive, Reissues 5184, 10093.
Sparking plug for gas engine, 696670.
Speaking tube whistle, 103406.
Spectacle case catch, 26891.

Spectacles—see Nose Guard, Nose piece.
Spectacles, rimless, 729247.
Speculum, 430350.
Speculum, rectal, 224991.
Speeder for cotton, Apr. 3, 1819, 3089.
Spike or hook, Dec. 2, 1834.
Spike manufacture, 1757.
Spike, method of pointing, 413342.
Spike pointing machine, 413341.
Spike, railroad, 394113.
Spindle—see Bobbin, Spinning, Twine winding.
Spindle and bobbin, 123625, Reissues 6016, 6036.
Spindle bearing, 264054.
Spindle bolster, 168644.
Spindle, means for driving by band, 296377.
Spindle support, spinning, 227129.
Spinner, sheet metal, 286115.
Spinning—see Spindle.
Spinning machine, spindle bearing for, Reissue 10288.
Spinning machine, spindle support for, 253572, 363425.
Spinning ring, Reissue 6386.
Spinning ring holder, 108270.
Spiral furniture spring, 98505.
Spirit meter, F. Cas. 10380.
Spittoon, 119705, Reissue 5514.
Spittoon, dental, Reissue 11696.
Splitting—see Stalk.
Splitting wood machine, 12857.
Spokes to metal hubs securing metal, 550815.
Spool winding machine, 26415.
Spoon and fork, 220002, 220003, Reissue 2682.
Spoon manufacture, Dec. 7, 1826.
Spring—see Mattress.
Spring, 238703, Reissues 4202, 6321. See also Bed bottom, Carriage, Corset, Furniture, Hoop skirt, Roller, Tempering.
Spring and drawbar, 460426.
Spring bed, 270453.
Spring bed and seat bottom, 639222.
Spring, carriage, Reissue 7017.
Spring, clasp, 418924.
Spring, corset, Reissues 3624, 5216, 7729.
Spring, door, 144926
Spring fixture for shades, Reissue 2756.
Spring, furniture, 122001.
Spring jack—see Annunciator, Switch, Telephone.
Spring jack switch, 488033.
Spring, rocking chair, 297108, 354043.

SPRING—STATUARY

Spring seat, 179400, 371448. See also Cushion.
Spring, spiral furniture, 98505.
Spring, tempering, 116266.
Spring tooth—see Harrow.
Spring, vehicle, 292147, Reissue 9542.
Spring, watch case, 290761.
Sprinkler head, 105 F. 190.
Sprinkler, lawn, 461415, 510496. See also Lawn.
Sprinkling can, 247855.
Square, graduating, carpenter's, Reissue 5408.
Square, try, 229283, Reissue 9419.
Squib for blasting, 134128, Reissue 8364.
Stage appliance, 643493.
Stage effects, 256007, 286709.
Stair, 269863. See also Carpet.
Stair pad, 363695, 541244
Stairway, moving, 479864.
Stalk splitting machine for whips, 454497.
Stamp—see Hand, Letter, Numbering, Ore.
Stamp cancelling and postmarking machine, 194 U. S. 601.
Stamp cancelling machine, 632527.
Stamp, dating, 185862, 287177.
Stamp, hand, 37175, 255229, 344903, Reissue 4675.
Stamp, postage, 91108.
Stamp, revenue, 93391.
Stamp, self-canceling revenue and postage, 98031.
Stamping—see Mail, Metal.
Stamping sheet metal, 114068.
Stand—see Trolley.
Staple—see Paper.
Staple, button fastening, 324053.
Staple, device for inserting metallic, 218227, 260365, Reissue 9803.
Staple fastener for wooden vessels, 314204.
Staple, wire, Reissue 2183.
Stapling—see Paper.
Stapling machine for papers, 274941.
Starch, apparatus for making from corn, 247153.
Starch manufacture, 65664, Reissue 9732.
Starch manufacture, apparatus for, 137911.
Starch, process of making from corn, 247152.
Starch, process of making lump, 541941.
Starch separator, 81888.
Starch tray, 78320.
Static electric machine, 275347, 331754.
Station indicator, 354929.
Statuary, composition for, 190769.

Stave cutting machine, 21856, Reissue 1456.
Stave fruit basket, 313910.
Stay—see Dress.
Stay, corset, 316034, 27 F. 289, 44 F. 19.
Stay, garment, 378080, Reissue 11009.
Steam—see Boiler, Exhaust, Governor, Lubricator, Packing, Valve.
Steam actuated engine, 442905.
Steamboat, Feb. 11, 1809, F. Cas. 8420.
Steamboat staging, 31147.
Steam boiler, 90506, 407260, 539189.
Steam boiler, heater and feeder for, 187825, 199038.
Steam boiler, sectional, 98490, 175548, 247910.
Steam boiler, water tube, 526947, 680707.
Steam car heater, 329017.
Steam eugine, March 8, 1834, 2872, 4199, 21059, 26901, 230943, Reissues 910, 1113.
Steam engine, bed plate for, 269329.
Steam engine governor, 301720, 308498, 358829.
Steam engine, reversing gear for, 248277.
Steam gauge, 18526. See also Registering.
Steam gauge cock, Reissue 4027.
Steam generator, 12682, 463307.
Steam generator, sectional casing for, 463308.
Steam heater, 64347.
Steam heating apparatus, 256089.
Steam heating pipe, 269224.
Steam joint, cement for, 36 F. 323.
Steam pipe covering. 276044.
Steam pump, Reissue 9818.
Steam, regulating for engine, 1868.
Steam tow-boat, Dec. 4, 1816.
Steam trap, 179581, 207484, Reissues 5549, 8286.
Steel—see Tempering.
Steel founding, art of, 504361.
Steel, high grade, 722504.
Steel manufacture, 72061.
Steel, method of making open hearth, 652226.
Steering canal boats, device for, Reissue 5630.
Steering head for road vehicle, 281091.
Stem winding—see Watch.
Stencil sheet, 332890.
Stencil sheet, duplicating, 562590.
Stencil sheet, wax, 224665, 377706.
Step cover, 90584, Reissue 5644.
Step, omnibus, 8119.
Stereoscope, 151576, 548149, 559878, Reissue 6557.

Stereotype plates, apparatus for casting and finishing, 721117, 721118, 721120, 721121.
Sticky fly paper, 278294, 305118.
Stiffener—see Heel, Shank.
Stiffenings, method of attaching to dress waists, 327626.
Still, water, 634556.
Stitch, method of forming chain, 461793.
Stock car, 96362, 96500, 168043, 168061, Reissue 7028.
Stock for bit, 73279, Reissue 6350.
Stocking—see Bathing, Hose, Shoe
Stocking holder, 159291.
Stocking, machine knit, 668674.
Stocking singeing machine, 641528.
Stocking supporter, 210666.
Stoker, automatic, Reissue 10942.
Stoker, boiler, 659200.
Stone—see Ore, Pulverizer.
Stone breaker, 259681, 265957, 272233, 305172. See Pulverizer.
Stone channeling machine, Reissues 2087, 2088.
Stone crusher, 68248, 277134, 325804, Reissues 2145, 3633.
Stone, holder for setting, 289106, 319095.
Stone, making smooth surface on, 373746
Stone planing machine, 575154.
Stone, pneumatic surfacer for dressing, 701580.
Stone sawing machine, 224760, 429874.
Stool, store counter, 597686.
Stop—see Tobacco machine.
Stop cock, May 15, 1822.
Stop cylinder press, 285826.
Stop device—see Hay.
Stop motion—see Twine winding.
Stop motion for loom, 595688.
Stop valve for hydraulic elevator, 173653.
Storage apparatus—see Conveying
Storage battery, 53668, 252002, 260654, 266090, 266262, 312599, 318-828, 337298, 337299, Reissue 11047, 50 F. 833, 64 F.775. See also Secondary battery.
Storage battery plate, 660228.
Store service apparatus, 221488, 229783, 241008, 273525, 273526, 303-006, 325618, 359875, 465967, 493621. See also Cash Carrier.
Stove, Oct. 10, 1834, 505, 1157, 2636, 3876, 6086, 8047, 19956, 22787, 39535, 45957, 51085, 142933, 142934, 177334, 180001, 183545, 236425, 249842, 368770, Reissues Nov. 28, 1836, 48, 1397, 1823, 1988, 3523, 3815, 4006, 5435, 5894, 6206, 6979, 7077, 9252. See Lamp, Oil stove, Gas.

Stove, blue flame oil, Reissue 11607.
Stove burner, vapor, 235600.
Stove, cooking, Reissue 11462.
Stove damper, 493548, 623417.
Stove door, 246606.
Stove fire pot, 283602.
Stove, gas, 79989, 419827, 420225, 465911, 573205, Reissue 7077.
Stove, gasoline, 235600, 358284.
Stove grate, 139583.
Stove guard plate, 80235
Stove, heating, 123142, 135621, 206074, 289802, 626997.
Stove, hot blast, 244997.
Stove, oil, 45957, Reissue 7751.
Stove oven doors, 313874.
Stove pipe, 481856,
Stove pipe elbow, machine for making, 224974, 234191.
Stove, water heater for, 357874.
Strainer for paper pulp, 511770, 530586.
Strap—see Shawl.
Straw—see Thrashing.
Straw braid, machine for sewing, Reissue 10600.
Straw cutter, 3431.
Straw stacker, 271943, 290050, Reissue 10347.
Street car, 432115. See also Car, Electric, Truck.
Street car life guard, 454214.
Street car motor truck, electric, 300828.
Street car rails, chair for, 364996.
Street car seat, 315898.
Street car signaling device, 161568.
Street lamp, 791355.
Street railway, 131913.
Street railroad chair, 312259.
Stretcher, curtain, 676895.
Stretching—see Cloth, Curtain.
Stretching machine—see Hat.
Strips, foundation. 25 F. 37.
Stuffing—see Mattress.
Stylographic pen, 199621, 227416, 264854, Reissue 9716.
Sucker rod for deep wells, 324922.
Sugar cane, machine for unloading and feeding, 583408.
Sugar cane unloading machine, 670176.
Sugar evaporator, 341669.
Sugar purifying, 37548.
Sulky, 494113, 498709 See also Plow.
Sulky road wogon, 266895.
Sulphate of alumina manufacture, 239089.
Sulphur candle, disinfecting, 390314.

SUPPLY—TAN

Supply connections for basins or baths, 449880.
Supporter—see Ring, Truss.
Surface sizing fibrous matter, Reissue 1649.
Surveying—see Tripod.
Suspender buckle, 295035.
Suspender button strap, 169855.
Suspender end, 94881.
Suspenders, Nov. 6, 1806, 69629, 141926, 668261.
Swaging—see Saw teeth.
Swaging, dies for, 68446.
Swaging machine, 474548, 588648.
Sweat—see Hat.
Sweat leather, 218220.
Sweating—see Tobacco.
Sweeper—see Carpet.
Swift bracket, 729084.
Switch—see Railroad, Snap, Telephone, Trolley.
Switch and signal, interlocking, 216510.
Switch-board, telephone, 617691, 617692, 669708. See also Telephone.
Switch-board test system, multiple, 427621.
Switch, double pole snap, 436122.
Switch, electric, 391512, 427521, 437667, 517100.
Switch, electric snap, 547149.
Switch for electric car motor, controlling. 393323.
Switch for motors, electric, 418678.
Switch pin, electrical, 223969.
Switch, railroad, 248990, 308373, 333474, 457905, 625961.
Switch rod, adjustable railroad, 649267.
Switch rod, railway, 651413.
Switch, spring jack, 488033.
Switch stand, 273450.
Switch stand, railway, 218110, 498196.
Switch, suspended, and traveling contact for electric railways, 424695.
Switch work, railway, 536734, 539878, 540796.
Swivel hook, 452320.
Syringe, 28196, 319937, 325132, Reissues 1940, 2005.
Syrup caster, Reissue 2406.
Table—see Billiard, Tile, Turn.
Table legs, fastening for, 480536.
Table slide, extension, Reissue 4317.
Tabulating machine, 628176.
Tack driving machine, 426160.
Tag, clothes, 149896.
Talking machine, 375579, 118 F. 609.
Talking machine, sound box for, 679896.
Tan bark, extracting, Reissue 1922.
Tan bark, extracting apparatus, 50626.

Tangential water wheel, 633184.
Tank—see Water closet.
Tank for asphalt, Reissues 6683, 6684.
Tank, gas, for vessels, 283962
Tank hoop coupling, lug for, 477174.
Tank water closet, 363566, 425921.
Tank, water, for railroad, Reissue 5544.
Tanning—see Hide.
Tanning hides, vats for, 7854.
Tape measure case, 338602, 498104.
Tapes, device for arranging, 50318.
Tapers, wax, 303984.
Target, 334782.
Target, flying, 231919, 281183, 311768, Reissue 10122.
Target trap, 252230, 301908, 313804, 322714, Reissue 10867.
Target trap, flying, 371839.
Target, trap for throwing, 302691.
Tea kettle, 226668.
Teaching—see Piano.
Tedder, hay, 198410.
Teeth—see Tooth
Teeth, artificial, 238910. See also Denture.
Teeth, comb, Feb. 22, 1798.
Teeth, cultivator, 16364.
Teeth, setting mineral, 8621.
Telegraph—see Electric
Telegraph and telephone, combined, 463569.
Telegraph, fire alarm, 178750.
Telegraph sounder, 352317.
Telegraph transmitting key, 270767.
Telegraph wire—see Electric
Telegraphy—see Wireless.
Telephone, 32 F. 287, 34 F. 795, 34 F. 803. See also Electric, Switchboard.
Telephone and telegraph, 463569.
Telephone call box, 309617.
Telephone circuit and apparatus, 449106.
Telephone exchange apparatus, 303714.
Telephone signaling apparatus, 559411.
Telephone switch, 215837, 270522.
Telephone switch board, 252576, 330061, 330067, 669708.
Telephone switch board, spring jack, 357538.
Telephone switch, spring jack, 552729.
Telephone system, 722367, Reissue 12156.
Telephone transmitter, 233969, 580434.
Temperature regulator, thermo pneumatic, 314027.
Tempering springs, 116266.

TEMPERING—TILTING

Tempering umbrella rib, 39210.
Tempering wire and steel, 21286, Reissue 1874.
Temple, weaver's, 8368.
Tender—see Locomotive.
Tennis shoes, 340135.
Tenon of metal, 76491.
Tension, photagraphic film, 317049.
Tension device for winding machine, 509413.
Tension for street car cable, 193929, 244147.
Tent, 14740.
Tenting cloth, 718499
Terret, harness, 207791.
Tester for cans, pneumatic, Reissue 11443.
Textile materials, frilling and crimping, 37033.
Theatre appliance, 222143, 263900.
Thermal cut out, 445217.
Thermal door closing apparatus, 680415, 680458.
Thermal electric circuit protector, 744197.
Thermometer, Reissue 10189. See also Pyrometer.
Thermo pneumatic temperature regulator, 314027.
Thermostatic fire door apparatus, 703347.
Thill coupling, 344786, 485856, 609928, Reissue 11260.
Thill coupling, anti-rattler for, 334842.
Thrasher, grain. 542.
Thrashing machine, 259264, 401840, 541101.
Thrashing machine, band cutter and feeder for, 556326.
Thrashing machine, grain cleaning device for, 562625.
Thrashing machine, straw elevator for, 467476.
Thread, packing, June 20, 1821.
Thread winding machine, 26415.
Threshing—see Thrashing.
Ticket—see Railroad.
Ticket holder, 652107.
Ticket, mileage, 314170
Tie for bales—see Bale tie.
Tie plate, 130 F. 900.
Tightener for belt, 151705.
Tile—see Brick.
Tile, fireproof flooring, 112926.
Tile machine table, 279259.
Tile manufacture, 97.
Tile, medallion, 336243.
Tile, ornamental, 336242.
Tiling, fireproof, Reissue 5174.
Tillers, method of connecting with rudder-heads, 3106.
Tilting bin, 447532
Tilting bin, pivoted, 614279.

Tilting chair, 185501.
Timber, chute for delivering, 107611.
Timber framing machine, F. Cas. 6556.
Time detector, watchman's, 170443, 305882, Reissue 3869.
Time lock, 262093, 284049, 284142. See also Lock.
Time lock, combination, 677363.
Time recorder, workman's, 452894, 461822, 482293, 515805, 528223.
Tin cans, machine for making, 281508. See also Can.
Tin, decorating plates of, Reissue 7556.
Tip for flexible gas tubing, 480247.
Tip, whip, Reissue 7382.
Tire—see Pneumatic, Rubber.
Tire, bicycle, Reissue 11216.
Tire, rubber wheel, 466532.
Tobacco curing furnace, Reissue 9108.
Tobacco flavoring machine, 494960.
Tobacco furnace, Reissue 9108, F. Cas. 9609a.
Tobacco leaves, art of treating, 604338.
Tobacco machine. plug, automatic stop for, 330851.
Tobacco machine, plug, 330849, 330850.
Tobacco, marking plug, 200133.
Tobacco, plug, 140020.
Tobacco, plug, finishing, 181512,
Tobacco, plug finisher, Reissue 8060.
Tobacco, plug, label, Reissue 7362.
Tobacco, preparing, 152649.
Tobacco press, plug, 270936.
Tobacco, process of curing and coloring, 240266.
Tobacco, process of sweating and curing, 91601.
Tobacco, resweating apparatus, 216293.
Tobacco sweat house, 228928.
Tobacco wrapper, 526517.
Toboggan slide, 367286
Toilet closet, dry 352157, 363971.
Toilet paper fixture, 325174
Toilet paper holder, 357993.
Toilet paper, package of, 325410.
Tool, 56166.
Tool grinding, 4204, Reissue 96.
Tool holder for lathe, 272304.
Tooth—see Comb, Dentistry. Harrow, Rasp, Spring.
Tooth crown, metal, 305238.
Tooth crown, mold for shaping, 571102.
Tooth, harrow, 28 F. 97
Tooth powder, receptacle for, 706710.
Topsails, extra yard for, 11125.
Torpedo envelope machine, 167814.

TORPEDO—TREES

Torpedo filling machine, 159995.
Torpedo, marine, 311325.
Torpedo, railroad, 409902, 474718, 667813.
Tow boat, steam, Dec. 4, 1816.
Towing machine, 383917.
Toy, 88 F. 517.
Toy animal, 485713.
Toy, ball, 213642.
Toy bank—see Bank.
Toy bell, Reissue 6644.
Toy cart or wagon, 651658.
Toy, elastic, 23001.
Toy wagon, 651658.
Trace trimmer, 611181.
Track—see Hay, Trolley.
Track, hay carrier, 493216.
Track, walking, gymnasium, 358453.
Traction engine, 272670.
Traction engine, friction clutch for, 302449, 330576.
Train—see Signal.
Tramway—see Cable, Rope.
Tramway, rope, and apparatus, 203249.
Transformer—see Alternating current, Electric.
Transformer, device for cooling alternating current, 366362.
Transformer, electric, 591869.
Transformer, means for cooling, 508654.
Transmitter—see Telephone.
Transmitter, electric telephone, 209266, 225388.
Transmitting—see Telegraph.
Transmitting power electrically, method of, 382280.
Transom lifter, 148538, 191088, 196851, 226353, Reissues 9307, 10264.
Transplanter, 423724, 486200.
Transplanting machine. 423200, 423723, 653425.
Trap—see Steam, Target, Waste.
Trap, casting lead, 386941.
Trap for water closet, 199582.
Trap, fly, Reissues 6493, 6811.
Trap, method of making lead, 406146.
Trap of soft metal, 220767.
Trap, waste, 286746.
Traveling bag, 177020, Reissue 9772.
Tray, 38519.
Tray, whist. duplicate, 93 F. 822.
Tread, rubber, for shoe, Reissue 12219.
Treadle, 176636. See also Sewing machine.
Tree, meat, 688674.
Trees, fumigating, 445342.

Tremolo, Reissue 3665.
Trestle, folding, 343829, 401848.
Trimmer—see Shoe.
Trimmer, trace, 611181.
Trimming—see Harness, Heel, Sole.
Tripod head for surveying, 197369.
Trolley, 437961.
Trolley crossing and switch, 396313
Trolley, electric railway, 396310, 397451, 412155, 495383, 495443, 690-639, Reissue 11872.
Trolley stand for electric cars, 488179.
Trolley switch, 424695.
Trolley switch or crossing, 393278.
Trolley track, 365240.
Trolley wire connector, 492811.
Trolley wires, system of suspending, and insuluting turn buckle, 394-039.
Trough, drinking, 316639.
Trough, watering, 221031.
Trousers hanger, 662656, 696940.
Trousers waistband, 562616.
Truck—see Car.
Truck, car, 430418.
Truck, car, electric motor, 373639, 461662.
Truck, electric street car motor, 300828.
Truck for cars, motor, 425653, 445308.
Truck for locomotive, 34377.
Truck for roller skate, 508617.
Truck for street car, motor, 627898.
Truck, motor, 493234, 507207.
Truck, street car, 478218, 627900.
Truck wheel, 4213.
Trunk, 72988, 128925, 145817, Reissue 6849.
Trunk, dress skirt and wardrobe, 604346.
Trunk fastener, 163028, 188950, 203860, 255122, Reissues 8520, 8521.
Trunk, hat, 573789.
Trunk lock, 285916, 337187.
Trunk molding, Reissue 7149.
Trunk, rollers for, 108300.
Trunnion bearings for ordnance, 378282.
Truss, 455771. See also Hernial.
Truss and supporter, 70324.
Truss bridge, 4726, 30577, 34183.
Trussing machine for tubs, barrels, etc., 477195. See also Tub.
Tub—see Bath tub, Trussing machine.
Tub for distilling oil, Reissue 3612.
Tub, machine for trussing, 294764, 356217.

Tube, 124011. See also Paper, Speaking.
Tube, manufacture of metallic, 96037.
Tube, flexible, 46507
Tube of leather, July 6, 1818.
Tube, speaking, whistle for, 103406.
Tube, welding, 365819.
Tube welding, apparatus for skelping or, 407306.
Tube, well, 65648, 130871.
Tubing—see Tip.
Tubing, butt weld, 581251.
Tug, hame, Reissue 10981.
Turbine water wheel, 265689, 535467.
Turbine wheel, Reissue 5154.
Turn buckle—see Trolley.
Turn table, 181817.
Turner—see Log.
Turning and boring mill, 113651.
Turning machine, axle, 127211.
Turning saw logs, 163398.
Turpentine, apparatus for distilling, 333750, Reissue 10689.
Tuyere, furnace, 205744.
Twine binder, 255712, 257837. See also Harvester.
Twine, paper, Reissue 1825.
Twine winding spindles, weight stop motion for, 727888, 736809.
Type blocks, forming letters on, Reissue 3442.
Tympan for printing press, 613217, 613220.
Type casting machine, 352869, 354935.
Type for printing, 139365.
Type manufacture, 55299.
Type mold, 187880.
Type, mold for casting, 354060.
Type production, relief, 388361.
Type setting—see Linotype.
Typewriter, 170239, 238387, Reissue 9690.
Typewriter, book, 620125.
Typewriter key, cushion for, 504065, 563163, 563164.
Typewriter, ribbon mechanism for, 650438.
Typewriting and manifolding, reproducing surface for, 348073.
Typewriting machine, 367447, 436916, 450592, 452268, 454845, 24 App. D. C. 462.
Typewriting machine, book, 477517.
Typewritten—see Printed.
Umbrella—see Tempering.
Umbrella case, 149480, 504945.
Umbrella rib, tempering, 39210.
Umbrella stick, tubular, 504944.
Under garment, 378465, 472555.

Undershirt, 240569, 357068, 550551.
Unhairing—see Pelt.
Unhairing fur skins, 383258.
Unhairing machine, Reissue 11079.
Union, steam pipe, 367725.
Unloading apparatus for cars and wagons, Reissue 4212.
Vacuum evaporator, 378843.
Valance, hammock, 474997.
Valve, 2631, 392961, Reissues 1112, 1113, 7886. See also Air, Brake, Lock, Overflow, Pump, Relief, Safety.
Valve, air brake, 270528.
Valve for beer vessels, relief, 318040.
Valve for governors, 7755.
Valve for petroleum packages, 102187.
Valve for pneumatic pipe, 401680.
Valve governor for water closet, 11113.
Valve indicator, 404844, 486610.
Valve, muffler for safety, 297066, 299503.
Valve, pump regulating, 207485.
Valve reseating machine, 429939, 456704.
Valve reseating tool, 400989.
Valve, safety, 58294, 85963, 94747, Reissue 3727. See also Safety valve.
Valve, steam, 49414, 236052.
Valve, steam actuated, 428672.
Valve, waste, 170709, 358147.
Valve, water closet, 371431.
Vamp stay for shoes, 717348.
Vapor—see Burner, Burning.
Vapor apparatus, 12535
Vapor burning stove attachment, 249842.
Vat for tanning hides, 7854.
Vault cover, 14281, Reissue 303.
Vault light, 263412.
Vault, roof for burial, 244224.
Vehicle dash, 213529.
Vehicle dash frame, Reissue 9891.
Vehicle, road, steering head for, 281091.
Vehicle, running gear for, 180886, Reissue 9729.
Vehicle spring, 292147, Reissue 9542
Velocipede, 59915, 310776, 323162, 398158, Reissue 7972, 8252. See also Bicycle pedal.
Velocipede, handles for, 245542.
Velocipede, pedals for, 329851.
Velocipede saddle, 216231, 278560, 289272.
Vending machine, bogus coin detector for, 613844.

VENDING—WALKING

Vending machine, coin controlled, 378982. See also Coin controlled mechanism.
Veneer cutting machine, May 1, 1829, 166353, 609513.
Ventilating barrel, 429021.
Ventilating louvers, 170852.
Ventilation of water closets, 171926.
Ventilator, Reissues 5786, 8597. See also Railroad.
Ventilator fan, 261128.
Ventilator for railroad cars, 33071, 327289, Reissues 9572, 11324.
Ventilator for refrigerator, 537293.
Vessel—see Glass, Sheet metal.
Vessel, ballasting, 126938, 232435.
Vessel for containing gases and liquids under pressure, 159433.
Vessel, gas tank for, 283962.
Vessels, means for relieving stranded, 189233.
Vestibule connection for railway cars, 403137.
Vibratile apparatus, 773234.
Visiting cards, 219464.
Volatile liquids, vessel for administering, 604191.
Vulcanized rubber packing, 86296.
Vulcanizing apparatus, 115207.
Wad winding machine, 137773.
Waffle irons, 229280, 277422.
Wagon, 155451. See also Jack.
Wagon and car unloading apparatus, Reissue 4212.
Wagon and carriage wheels, construction of, 81883.
Wagon axle skein, 256744.
Wagon body, 142989.
Wagon body irons, 187452.
Wagon, coal, 736841, 532216, Reissue 9368.
Wagon, dumping, 211052.
Wagon, fifth wheel for, 579857.
Wagon gearing, 31134, 108085, 246225, Reissue 6660.
Wagon or cart, child's toy, 651658.
Wagon reach, 69789, 83497.
Wagon, road, 239850.
Wagon scale, 127 F, 709.
Wagon stake pocket, 351246.
Wagon, sulky road, 266895.
Wagon, toy, 651658.
Wagon unloading apparatus, Reissue 4212.
Wainscoting, 346899.
Waist, dress, 327626.
Waistband fastener, 408300.
Waistband for trousers, 562616.
Waist belt, 542306.
Walking track, gymnasium, 358453.

Wall—see Fire proof.
Wall coping, 370437.
Wall coping, machine for molding, 371574.
Wall coping, moulding, 313583.
Wall paper, tool for trimming, 389901.
Wardrobe—see Trunk.
Wardrobe bedstead, 204321, 270327.
Warp—see Loom.
Wash basin, overflow for, 379973.
Washboard, 6835, 168252, 171568, 187842, Reissue 6673, 37 F. 57.
Washboard frame, 223338, 255555.
Washer—see Barrel, Nut, Ore.
Washer, sand, 206514.
Washing machine, 14818.
Washing machine, bottle, 213583, 690563.
Washing machine, mechanical movement for, 606044, 608220, 736285.
Washing machine, means for operating, 535465.
Washing shavings, Reissue 8099.
Waste—see Trap.
Waste pipe trap, 217243.
Waste trap, 286746, 390821.
Waste valve, 358147.
Waste valve for bath tub, 170709.
Watch, Reissue 4334.
Watch case, apparatus for making core for, 149 U. S. 315.
Watch case centers, method of ornamenting, 434539, 435835.
Watch case pendant, 411420.
Watch case spring, 290761.
Watch chain machine, May 4, 1820.
Watch crown, 348620.
Watch crown, apparatus for corrugating cores for, 329285.
Watch crown, apparatus for making cores for, 329284.
Watch crown cores, apparatus for capping, 355144.
Watch protector, 413644.
Watch regulator, 284079.
Watch, roller abstractor for, Reissue 9467.
Watch, stem winding, 287001, 325506, Reissues 10631, 11100.
Watchman's time detector, Reissue 3869. See also Time detector.
Water—see Feed, Soda.
Water closet, 21734, 155814, 183716, 255485, 258144, 260232, 308358, 425416, 461734, Reissues 978, 4137, 4138. See also Tank.
Water closet basin, 302666.
Water closet bowl, 229326, 236905.
Water closet cistern, 566770.
Water closet, flushing apparatus for, Reissue 10826.
Water closet, flushing tank for, 369843.
Water closet receiver, 106089.

WATER—WEIGHING

Water closet, slop safe for, 199806.
Water closet, supply tank for, 245318.
Water closet, tank for, 354285.
Water closet, trap for, 199582.
Water closet valve, 371431.
Water closet, valve governor for, 11113.
Water closet ventilator, 171926.
Water dam, 80492, 85598, Reissue 6249. See also Dam.
Water distribution, main for, 312158.
Water, drawing from wells, 15273.
Water filtering, 293740.
Water gas, apparatus for manufacture of, 386458, 168 U. S. 255.
Water heater, 680769.
Water heater, bath, 555033.
Water heater for stove, 357874.
Water meter. 357159, 379805, 385970, Reissue 5806, 38 F. 589.
Water meter, disk, 387831, 527534, 527535, 527537, 547178.
Water meter with revolving piston, 433088.
Water motor, 146120.
Water pipes pressure safety device for, 141685.
Water proof fabric, 260063.
Water proof paper, maltha coated, 378520.
Water still, 634556
Water supply regulator, Reissue 5132.
Water supply system, 218875.
Water, supplying locomotive, 99723.
Water tank for railroad, Reissue 5544.
Water tube—see Boiler.
Water wheel, Oct. 19, 1829, 1658, 2708, 619148, 619149. See also Turbine.
Water wheel and sewing machine, combined, Reissue 5590.
Water wheel bucket, 454638.
Water wheel casing, 633962.
Water wheel, tangential, 633184.
Watering trough, 221031.
Wax—see Stencil.
Wax tapers, machinery for making, 303984.
Wax thread—see Sewing machine.
Waxing paper, process for, Reissue 8460. See also Paper.
Weaner, calf, 419078.
Weather strip, 381166, 424905, 434890.
Weaver's harness, machine for making, Reissue 5282.
Weaver's temple, 8368.
Weaving wire cloth, 239012.
Weed cutter and cultivator, 327683.
Weeding machine, 600782.
Weighing—see Scale.

Weighing and package filling machine, 633675.
Weighing and price scale, 385005.
Weighing apparatus, indicator for, 387285.
Weighing cartridge machine, 185858
Weighing machine, coin controlled, 336043, 733059.
Weighing scale, 14119, 24162, 25148, 35348, 375102, 11 F. 901.
Weigning scale, coin controlled electrical, 392698.
Weight stop—see Twine winding.
Welding, apparatus for electric, 347141, 385022.
Welding, art of electric, 347140.
Welding ends of tubes, 365819.
Well—see Oil.
Well, apparatus for sinking, 382689.
Well bailer, 686951.
Well boring apparatus, 481636.
Well, deep, sucker rod for, 324922.
Well, drawing water from, 15273.
Well, drill for, Reissue 6337, 22 F. 780.
Well, driven, Reissue 4372.
Well forming machine, 49349.
Well, packing for deep, 439166, Reissue 8786.
Well reservoir, Reissue 4165.
Well, sinking, 50614.
Well tube, 65648, 130871.
Welt guide for sewing machines, 419239, 560705.
Wheel—see Car, Plow, Tire, Turbine, Wagon, Water, Wind.
Wheel, car—see Die.
Wheel, cast iron, 640, 5531, Reissue 468.
Wheel, fifth, for wagon, 579857.
Wheel for car, 16 How. 98.
Wheel for car, casting, 110779.
Wheel for car, wrought iron, 7676.
Wheel for carriage, 17520.
Wheel for door hanger, 422305.
Wheel for locomotive, 58447.
Wheel, harrow, Reissue 8765.
Wheel, marking, Reissue 6714.
Wheel, removing truck, 4213.
Wheel rim, 301245.
Wheel, rim for bicycle, 496971.
Wheel, rubber tired, 554675.
Wheel, wooden rim bicycle, 547732.
Wheelbarrow, metal, 349681.
Wheeled chair, 185193.
Wheeled cultivator, 222767, 242497, 329921.
Whip, 60606.
Whip, machine for fitting sidings for, 189569.

Whip socket, 221482, 231510, Reissues 4071, 5400, 5713, 8581, 9297.
Whip socket attachment, 423679.
Whip socket clasp, 166724.
Whip socket manufacture, Reissue 5651.
Whip, stock splitting machine for, 454497.
Whip tip, Reissue 7382.
Whiskey, process of making, 263087.
Whist, duplicate, 525941, 555903.
Whist tray, duplicate, 93 F. 822.
Whistle for speaking tube, 103406. See also Speaking tube.
White oxide of zinc manufacture, 8756, 13416, 13806.
Wick—see Lamp, Lantern.
Wick raiser for lantern, 476506.
Wick raiser, lamp, 348969.
Wind mill, 185423, 220514, 240607, 258352, 362870, 390698, 433531, Reissues 8826, 8843, 6101, 9493, 10834.
Wind mill gear, 85 F. 782.
Wind wheel, 87628.
Winding—see Spool, Tension, Thread, Twine.
Winding cops, method of, 480158.
Winding machine, 480157, 506959, 562263, 572309.
Winding machine, cop and bobbin, 166 U. S. 501.
Winding machine, wad, 137773.
Winding yarn, 236766.
Window—see Shade.
Window cleaner, Reissue 8393.
Window, fireproof, 600186.
Window frame, adjustable, Reissue 4698.
Window frame screen, 328080.
Window or curtain fixtures, 513307.
Window, railway car, 192014.
Window sash bar, 420510.
Window sash bar, metallic, 415068.
Window sash fastener, 212487, 284506, Reissue 6693.
Window sash holder, 82580, Reissue 9301.
Window sash, process of manufacturing metallic cross bars and rails for, 412751.
Window sash supporter, Reissue 8672.
Window screen frame, 281964.
Wines, process of imparting age to, 48728.
Winnowing machine, 6757.
Wire—see Barbed wire, Fence, Glass, Jeweler's, Telegraph, Tempering, Trolley.
Wire, apparatus for laying conduit for, 467650.
Wire bag fastener, 135899.
Wire barbing machine, 295513, 711303.
Wire cable—see Barbed.

Wire cage, Reissue 8594.
Wire cloth, art of weaving, 239012.
Wire cloth, manufacture of painted, 304154.
Wire cloth, shuttle for weaving, 239011, 299895.
Wire coil fasteners, machine for making and inserting, 593406.
Wire coupling, 428123, 575641.
Wire, electric, conduit, 396407.
Wire, electric telegraph, Reissues 6954, 6955.
Wire fabric—see Bed bottom.
Wire fabric machine, 505607, 552025.
Wire fence, 6106, 316458. See also Barbed.
Wire fence machine, 289507, 356322, 357067, 414844, 435042.
Wire glass, 741125.
Wire grating manufacture, Reissue 747.
Wire, machine for coiling, 153 U. S. 120.
Wire netting, machine for embedding in glass, 483020, 483021, 531-570.
Wire rods, mill for rolling, 392365.
Wire rope clamp, 388840.
Wire, seamless plated, 445814.
Wire staple, Reissue 2183.
Wire, woven, mat and scraper, 399554.
Wireless telegraphic apparatus, Reissue 11913.
Wireless telegraphy, 131 F. 491, 131 F. 493.
Wireless telegraphy, receiver for, Reissue 12115.
Wiring structures for electric lighting, 401498.
Wisp broom, 218251.
Wood bending machine, Reissues 853, 1312.
Wood carving machine, 571535.
Wood, device for bending, 50602.
Wood distilling apparatus, 658888.
Wood, filling, 172534
Wood flooring, 531711.
Wood graining process, 164858.
Wood gutter, machine for making, Reissue 6675.
Wood planer, 259958.
Wood, process of cutting articles from, 278828.
Wood, process of distilling, 674491.
Wood splitting machine, 12857.
Wooden pipe, 359590.
Wooden plate, 273773.
Wooden plates, machine for cutting, 276198.
Wool carding machine, 4023, Reissue 1137.
Wool cleaning, 3120.
Wool lubricating machine, 47938, Reissue 2213.
Wool manufacture, Dec. 15, 1826, Reissue July 29, 1836.
Workman—see Time recorder.

Woven fabric, 353790.
Woven wire—see Mattress.
Woven wire mat and scraper, 399554.
Wrapper, cigar, cutting machine, 315408, 594835.
Wrapper for tobacco, 526517.
Wrapper, ham boiling, 624839.
Wrapper, machine for making bottle, 639395.
Wrapper, newspaper, 558244.
Wrapper with tearing slip, perforated, 519158.
Wrapping, cigars, machine and method for, 261849.
Wrench, 45334, Reissues 3483, 5294. See also Bung.
Wrench for extracting bung bush, Reissues 5026, 5027.
Wrench for oil well tools, 422879.
Wrench, ratchet, 277256.
Wringer, clothes, Reissues 1934, 2829, 5223.
Wrought iron castings, process of making by adding aluminum, 333-373.
Wrought iron pipes, thread protector for, 311171.
Wrought iron wheel for car, 7676.
Xyloidine, 97454, 101175.
Yard for topsail, 11125.
Yarn, dyeing, Reissue 217.
Yarn, machine for winding, 236766.
Yarn, manufacture of balls and rosettes of, 177194.
Zinc white manufacture, 8756, 13416, 13806.
Zinc, white oxide of, 8756, 13416, 13806.
Zinc, process of refining, 448802.

THE END

FEB 11 1953

LAW LIBRARY
UNIVERSITY OF CALIFORNIA
LOS ANGELES

UC SOUTHERN REGIONAL LIBRARY FACILITY
A 000 717 022 8